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SECRETARY OF THE AIR FORCE

AIR FORCE INSTRUCTION 23-201

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Materiel Management

FUELS MANAGEMENT

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction implements AF Policy Directive (AFPD) 23-2, *Management of US Air Force Bulk Petroleum and Related Products*, Department of Defense (DoD) Directive 4140.25, *DoD Management Policy for Energy Commodities and Related Services*, and Defense Logistics Agency (DLA Energy) Interim Policies and Procedures. This directive sets forth guidance and procedures regarding petroleum, aviation fuels, ground fuels, cryogenic fluids, and missile propellants, pure gases, and chemicals for aerospace weapon systems, equipment energy commodities and related services. This directive applies to all Active Duty, Reserve, Guard, Contractors, Air Force/DoD Civilians, local national civilians employed by the USAF, and Civil Air Patrol personnel that receive, store, issue, perform quality control, and/or account for aviation fuels, ground fuels, cryogenic fluids, and missile propellants. Certain fuel accounts with small mission requirements may be exempt from certain provisions of this instruction with their Major Command (MAJCOM) approval. **Note:** The term MAJCOM, when used in this publication, refers to all Major Commands (MAJCOM), Direct Reporting Unit (DRU), Air National Guard (ANG), and Air Force Reserve Comand (AFRC) unless otherwise indicated. Additionally, other MAJCOM responsibilities may exist within each functional area of this AFI. This publication may be supplemented at any level, but all (direct supplements) (MAJCOM, FOA, DRU supplements) must be routed to AF/A4LE for coordination prior to certification and approval. The use of any specific manufacturer name, commercial product, commodity, or service created by this publication does not imply endorsement by the Air Force. RECORDS MANAGEMENT: Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Manual (AFMAN) 33-363, *Management of Records*, and disposed of in accordance with Air Force Records Information Management System (AFRIMS) records disposition schedule located at **https://www.my.af.mil/afrims/afrims/afrims/rims.cfm**. DLA Energy requires that Defense

Working Capital Fund (DWCF) records be maintained in accordance with (IAW) DLA Energy Policy, *Document/Data Control and Retention*. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the AF Form 847, *Recommendation for Change of Publication*, and route AF Form 847s from the field through the appropriate functional chain of command.

SUMMARY OF CHANGES

This publication is updated to reflect changes in guidance and procedures dealing with fuels management, it is substantially revised and must be completely reviewed. Major changes realigned the fuels management structure roles and responsibilities; removed compliance section responsibilities; established environmental monitor duties; removed cryogenics production requirements; assigned duties to Non Commissioned Officer in Charge (NCOIC) fuels support; updated all attachments added 2 new attachments; and updated reference publication dates.

Chapter 1

HQ USAF, THE DIRECTORATE OF LOGISTICS MATERIEL SUPPORT DIVISION, FUELS (AF/A4LE)

1.1. AF/A4LE General Responsibilities.

1.1.1. Establishes/updates USAF policy for managing petroleum resources.

1.1.2. Provides staff supervision to implement management concepts outlined in this instruction.

1.1.3. Develops budget estimates and accomplishes other financial management responsibilities.

1.1.4. Provide a standard fuels management organizational structure, see **Attachment 4**.

1.1.5. Manages Logistics Education Advancement Program (LEAP) IAW **Attachment 11**.

1.1.6. Is an advisor for the AF Installation Planning Review Board (IPRB).

1.1.7. Is responsible for Headquarters Air Force (HAF) Functional Area Manager (FAM) duties.

1.1.8. Approves permanent waivers to this instruction (deviations over one year)

1.2. Fuels Career Field Workshops.

1.2.1. Chairs the Fuels Utilization & Training Workshop (U&TW). Hosted by AETC biennially or as directed by the 2F Career Field Manager to develop and implement fuels training requirements and material.

1.2.2. U&TW Core Members: AF/A4LE, Air Force Pertoleum Agency (AFPA), Major Command (MAJCOM) Fuels Management Teams (FMT), and 2F Training Manager (Schoolhouse Superintendent).

1.2.3. U&TW Advisors: AETC Training Manager, and Fuels Officer Course Representative.

1.2.4. Chairs the Fuels Support Equipment & Vehicle Working Group (FSEVWG). Hosted by AFPA annually, or more frequently as determined by the Fuels Career Field Manager, to review and develop vehicle and equipment policy, allowance standards, performance specifications, depot maintenance requirements, and technical development for AF fuels applications.

1.2.5. FSEVWG Core Members: AF/A4LE, AFPA, and MAJCOM FMTs.

1.2.6. FSEVWG Advisors: WR-ALC/LES/LEE, 2F Training Manager (Schoolhouse Superintendent).

1.2.7. Chairs the Fuels War Planner Workshop (WPW) held in conjunction with the FSEVWG or Air Force Fuels Services Day, as determined by the Fuels Career Field Manager, to review, develop, and validate Functional Area Manager (FAM) guidance, Unit Type Codes (UTC) and Air & Space Expeditionary Force (AEF) requirements.

1.2.8. WPW Core Members: AF/A4LE, ACC/A4XW, AFPA, MAJCOM FMTs/FAMs, and AFCENT.

1.2.9. WPW Advisors: AETC/DPW, and ACC (Pilot units)

1.2.10. Chairs Air Force Fuels Services Day held in conjunction with DLA Energy World-Wide or PETRO conferences as directed by the 2F Career Field Manager. AF/A4LE, AFPA, and MAJCOM FMTs are core members.

1.3. Supporting War Plans. Fuels Managers at all levels must be familiar with AFI 10-401, *AF Operations, Planning and Execution* AFI 10-244, *Reporting Status of Aerospace Expeditionary Forces*, AFI 10-404, *Base Support and Expeditionary Site Planning*, and AFI 23-221 *Fuels Logistic Planning* when preparing their war plans.

Chapter 2

AIR FORCE PETROLEUM AGENCY (AFPA)

2.1. AFPA General Responsibilities.

2.1.1. Provides assistance to AF/A4LE by staffing the Combat Support Center (CSC) as needed.

2.1.2. Performs fuel site surveys and technical assistance visits upon request.

2.1.3. Maintains waiver authority for Petroleum Logistics Management Course (PLMC) handled on a case-by-case basis prior to members being appointed as a Responsible Officer (RO).

2.1.4. Serves as a voting member on the DLA Energy Component Steering Group (CSG).

2.1.5. Chairs AF pre-Installation Planning Review Board (IPRB) and hosts it annually prior to the DLA Energy IPRB (approx Oct-Nov) to review and validate Military Construction (MILCON) projects, implement fuels infrastructure policy, review Sustainment Restoration Modernization (SRM) projects, and prepare submittal of AF inputs to the DLA Energy IPRB.

2.1.6. AF-IPRB Core Members are: AFPA, AFCESA/CEOA, MAJCOM FMTs, and MAJCOM Engineers.

2.1.7. Represents the USAF on the DLA Energy-chaired IPRB, as a voting member, to prioritize DLA MILCON projects.

2.1.8. AF liaison to the DLA Energy Operations Center during contingencies/exercises; provides assistance to the war fighter.

2.1.9. Advises DLA Energy on operational and product requirements affecting AF units.

2.2. MILCON and SRM Projects.

2.2.1. AF Service Control Point (SCP) for fuels MILCON projects; consolidates the prioritized list of MAJCOM MILCON projects and forwards packages to AF/A4LE for coordination.

2.2.2. Establishes submission schedule for AF projects to ensure submissions meet the DLA Energy data call.

2.2.3. Coordinates with AF/A7C/P for MILCON data calls.

2.2.4. Ensures MAJCOMs complete DD Form 1391, *FY ____ Military Construction Project Data* for MILCON consideration.

2.2.5. Provides technical assistance to base/MAJCOM personnel when preparing DD Form 1391s.

2.2.6. Reviews construction designs to ensure standardization/modernization consistency.

2.2.7. Manages AF wide SRM program, supporting MAJCOMs for all capitalized fuels infrastructure.

2.2.8. Approves and coordinates all SRM requirements and champions MAJCOM priorities by advocating for SRM funding execution for fuels facilities required to carry out organizational responsibilities.

2.2.9. Coordinates all alternate fuel infrastructure concerns with MAJCOM, AF/A4LE, and DLA Energy.

2.2.10. Ensures All MAJCOMs and Installation staffs will keep the SRM-E database updated with all deficiencies and supporting information allowing DLA Energy to properly forecast funding requirements.

2.2.11. Monitors the SRM-E database to have current information regarding emergencies and when deficiencies reach the SCP level for review/acceptance/rejections/comments.

2.3. AF Fuels Vehicle and Fuels Support Equipment (FSE) programs.

2.3.1. Consolidates and validates equipment/vehicle requirements and coordinate with item managers on funding/procurement programs.

2.3.2. Develops, validates and coordinates equipment/vehicle allowance standards with item managers.

2.3.3. Reviews, validates, and provides updates on equipment/vehicle Technical Orders (TOs).

2.3.4. Provides equipment item managers with detailed customer requirements, includes technological advances for consideration on new buy programs.

2.3.5. Evaluates Commercial-Off-The-Shelf (COTS) equipment capabilities and coordinates requirements with MAJCOMs.

2.3.6. Assists WR-ALC program offices with development purchase descriptions.

2.3.7. Provides technical assistance to WRM global manager for FSE.

2.4. Plans and Programs.

2.4.1. Collects, analyzes and publishes base fuel mishap reports and environmental incidents.

2.4.2. Provides trend analysis from data effecting or potentially effecting fuel operations.

2.4.3. Performs research for AF/A4LE and shares knowledge with MAJCOMs.

2.4.4. Coordinates MAJCOM and Air Staff requests for DLA Energy optimization studies.

2.4.5. Coordinates draft DLA Energy publications and policy revisions with MAJCOM staffs and support agencies prior to submission to AF/A4LE for staffing, approval and publishing.

2.4.6. Reviews all base fuels service contracts submitted by MAJCOM Fuels Management Teams and coordinates with AF/A4LE.

2.4.7. Coordinates with DLA Energy contracting office and all base fuels service contracts Contracting Officer’s Representative (COR) or Property Administrators (PA) for DLA Energy funded fuels contracts

2.4.8. Provides Subject Matter Expertise (SME) for technical review during contract source selection.

2.5. Manages the AF Fuels Requirements Program.

2.5.1. Validates, consolidates and coordinates annual fuel and hypergolic requirements with DLA Energy and MAJCOMs.

2.5.2. Validates and coordinates inventory levels of Peacetime Operating Stock (POS) with DLA Energy annually.

2.5.3. Oversees AF fuels transactions, Fuels Enterprise System (FES) accounting rejects and coordinates with MAJCOMs for resolution.

2.5.4. Publishes the AF Fuels Directory annually and updates as required.

2.5.5. Assist bases with fuel spot-buys through DLA Energy for mission sustainment during periods of lapses in contracted supply or during emergency conditions.

2.5.6. Consolidates Air Force fuel budget submissions annually for inclusion in DLA Energy's Program Objective Memorandum (POM).

2.6. Technical Support and Quality Assurance.

2.6.1. Provides oversight and support for all fuels, lubricants, chemicals, propellants, and gases worldwide.

2.6.2. Manages 37 & 42B series TOs for fuel quality control guidance and operates worldwide aerospace fuels area laboratories.

2.6.3. Coordinates certification efforts for new emerging, alternate, and alternative type fuels.

2.6.4. Arranges contract fuel and cryogenic testing on an emergency basis at designated locations.

2.6.5. Performs product service engineering and scientific support for petroleum, chemicals and cryogenics.

2.6.6. Approves fuel analyses performed anywhere other than a qualified base fuels laboratory facility. This does not include field-testing in a contingency environment.

2.6.7. Staffs the Technical Division which provides assistance to detect and correct deficiencies with product quality, handling procedures and fuel systems IAW **Attachment 12**.

2.6.8. Provides support to the NATO Petroleum Handling Working Group to ensure standardization/inoperability of fuel equipment and facilities.

2.6.9. Performs POL packaged products quality and testing support for AF and DLA.

2.6.10. Is responsible for the preparation, maintenance, and custodial review of military specifications for procuring fuels, aerospace propellants, lubricants, hydraulic fluids, gases, and chemicals.

2.6.11. Serves as the preparing activity for TOs on the equipment associated with the storage and handling of these products, quality surveillance, space launch system support, and weapon system support.

2.6.12. Partner with other government, industry, and allied nations on Petroleum Oil & Lubricants (POL) research and development, standardization, and interoperability issues.

2.6.13. Is the US head of delegation for Air and Space Interoperability Council (ASIC) and NATO Standardization Agreements (STANAG) for air/ground POL, gases and chemicals.

2.6.14. Is the AF representative and functional expert to the American Society for Testing and Materials International (ASTM) and Coordinating Research Council (CRC) for aviation and ground fuel products.

2.6.15. Performs fuels laboratory testing using ASTM Standards, military standards, and AF TO protocols.

2.6.16. Performs investigative/failure analysis of unknown fuel and cryogenic contaminants.

2.6.17. Supports space launch activities and provides quality surveillance testing for gaseous, chemicals, and hypergolic products.

2.6.18. Develops and evaluates emerging laboratory testing technologies.

2.7. Automated Information Technology (AIT).

2.7.1. Provides acquisition, disposition and replacement instructions for Automated Information Technology (AIT) IAW **Attachment 13**.

2.7.2. Provides oversight for Base System Modernization-Energy (BSM-E) Helpdesk trouble reporting and facilitates resolutions with applicable agencies.

2.7.3. Functions as AF lead for fuels automation.

2.7.4. Manages AF testing of new systems and interfaces with other AIT systems.

2.7.5. Coordinates testing requirements with MAJCOMs and test locations.

2.7.6. Provides test results to DLA Energy with recommended improvements.

2.7.7. Administers system change requests and AF recommended system upgrades for all fuels AIT systems.

2.7.8. AIT equipment and Technology Programs:

2.7.8.1. Interfaces with DLA Energy concerning management of Automated Information

2.7.8.2. Automatic Tank Gauging (ATG).

2.7.8.3. Mobile Automated Fuels Service Station (MAFSS).

2.7.8.4. Automated Fuels Service Station (AFSS).

2.7.8.5. Tactical Automated Fuels Service Station (TASS).

2.7.8.6. Automated Data Collection/Fuels Dispensing Systems (ADC/FDS).

2.7.8.7. Automated Point of Sale Device (APOSD).

2.7.8.8. Scully Overfill prevention systems.

2.7.8.9. Pump and valve control.

2.8. Safety and Deficiencies.

2.8.1. Maintains/monitors the fuels web-based Mishap Reporter Program.

2.8.2. Jointly determines with MAJCOM Fuels Management Team whether mishap circumstances warrant on-site technical evaluation.

2.8.3. Monitor mishap reports that warrant a Product Quality Deficiency Report (PQDR) or Material Deficiency Report (MDR) submission into Joint Deficiency Reporting System (JDRS).

2.8.4. Provides notification to DLA Energy-WE when the validated incident qualifies as a DLA Energy reportable fuel spill: twenty-five (25) gallons or greater on land and/or any fuel spill (regardless of quantity) on navigable water which creates water sheen.

2.8.5. AFPA will also report potential spills to DLA Energy within 24 hours if not validated by MAJCOM. AFPA will notify the effective MAJCOM for actions.

2.8.6. Follows-up on open mishap reports in coordination with the MAJCOM.

2.8.7. Coordinates with DLA Energy for on-site visits/ investigations related to mishaps/fuel releases involving fuel facilities and/or when the incident results in adverse environmental consequences or media coverage.

2.8.8. Prepares mishap reports and distributes a monthly/annual (calendar year) trend and analyses of Fuels related mishaps.

2.8.9. Advises the USAF fuels community of mishap trends and recommend corrective procedural action and/or technical data changes, as necessary.

2.8.10. Sets agenda and hosts teleconferences with HAF and MAJCOMs to discuss mishaps/negative trends and other topics.

2.8.11. Ensures Deficiency Reports (DR) received are reviewed and information will be disseminated to all MAJCOMs depending on the circumstances involved with the DR. This procedure prevents the need for the MAJCOM FMT to query the JDRS for issues on fuels vehicles and FSE.

2.8.12. Coordinates the remedy and closure of the DR with the Warner Robins Air Logistics Center (WR-ALC). AFPA liaison with WR-ALC will work with Program Managers and their teams to resolve all fuels related DRs. Progress will be provided to the MAJCOMs as part of the normal JDRS routing process.

Chapter 3

MAJOR COMMAND FUELS MANAGERS (MAJCOMS)

3.1. MAJCOM General Responsibilities.

3.1.1. May waive provisions in this instruction for up to 1 year and will send an information copy to AF/A4LE.

3.1.1.1. MAJCOMs may approve deviations to the management structure with prior coordination from AF/A4LE.

3.1.1.2. Approve variances to laboratory facility criteria with coordination from the AF Safety Center, Ground Safety (AFSC/SEG) and MAJCOM Safety offices.

3.1.2. Forecast, report, and submit all fuels, cryogenics, gases and hypergolic requirements applicable to each command.

3.1.2.1. Validate base requirements and consolidates submission prior to sending to AFPA.

3.1.2.2. Plan and program for fuels and cryogenics facilities and the equipment required to carry out organizational responsibilities.

3.1.3. Promote supply, maintenance, security, and safety discipline in all fuels operations.

3.1.4. Conduct logistics improvement studies to increase AF readiness and combat capability.

3.1.5. Forecast command formal training requirements.

3.1.5.1. Obtain quotas for technical training.

3.1.5.2. May waive fuels course prerequisites in coordination with 2F Schoolhouse Superintendent.

3.1.6. Develop, evaluate, and recommend improved concepts and methods to enhance logistics efficiency and effectiveness.

3.1.7. Provide guidance/policy to their bases for official passport requirements.

3.1.8. Provide assistance to bases for compliance with all federal, state, local and foreign government environmental laws and regulations.

3.1.9. Notifie AFPA Technical Division who will coordinate with DLA Energy Quality Section and the assigned Quality Surveillance Representative when handling contaminated or off-specification fuel products.

3.1.10. Management Engineering Program (MEP).

3.1.10.1. Take a proactive role during the manpower standards development process:

3.1.10.2. Know the manpower study schedule.

3.1.10.3. Provide recommendations to the function review workshop.

3.1.10.4. Review all manpower study documentation such as work center description, measurement plan and final report for accuracy and provide any corrections.

3.1.10.5. Verify measurement data accuracy.

3.1.10.6. Coordinate on manpower variances.

3.1.10.7. Assist in developing work center productivity enhancements.

3.1.10.8. Submit Authorization Change Requests (ACR) to local Manpower Office.

3.2. MILCON and SRM Projects.

3.2.1. Ensure all Fuels Management Teams (FMT) staffs involved in the SRM process obtain a SRM-E account and use the DLA Energy SRM-E system to monitor deficiencies. A7/Fuels Engineer validates base-level requirements in accordance with AFI 32-1021, Planning and Programming Military Construction (MILCON) Projects. A4/ FMs maintain access to the DLA Energy Sustainment Restoration Modernization/Energy (SRM/E) database showing MAJCOM concurrence/non-concurrence for audit purposes.

3.2.1.1. Verify the following information:

3.2.1.1.1. Is the tank size the minimum required?

3.2.1.1.2. Storage capacity must be adequate to support POS and War Readiness Material (WRM) requirements. Consideration to mission changes must be included in computation.

3.2.1.1.3. Does the project fulfill installation mission needs?

3.2.1.1.4. Does the DD Form 1391 clearly state what the mission is, (i.e. strategic, enroute, power projection?)

3.2.1.1.5. How does the project effect the operation?

3.2.1.1.6. Have better alternatives been considered?

3.2.1.1.7. Does the project meet eligibility requirements as stated in DoD 4140.25-M?

3.2.1.1.8. Does the project fit the definitions for MILCON as stated in DoD 4140.25-M?

3.2.1.1.9. Ensure the DD Form 1391 submitted information is compiled and verified IAW DLA Energy Policy.

3.2.2. Coordinates with MAJCOM engineers and programmers to prioritize validated projects. OCONUS MAJCOMs will send their MILCON projects to their Joint Petroleum Office (JPO) who will prioritize the projects and submit them to DLA Energy.

3.2.3. Forwards a courtesy copy of the coversheet and DD Form 1391 to the AFPA with a prioritized listing of the projects. AFPA will consolidate the projects and forward the MILCON package to AF/A4LE for information.

3.2.4. Ensures each deficiency submitted within SRM-E contains a strong descriptive justification, supporting documentation, a facility real property number, and a Base/MAJCOM priority.

3.3. Fuels Vehicles and FSE.

3.3.1. Review and validate command fuels vehicle and equipment authorizations.

3.3.1.1. ACC/A4RE manages Allowance Standard (AS) 154 and coordinates with item managers on funding/Procurement programs.

3.3.1.2. ACC/A4RX manages /POMs for WRM Fuels Support Equipment (FSE) procurement, storage, and maintenance.

3.3.1.3. ACC/A4RX approves disposal of all FSE assets.

3.3.2. Coordinate all vehicle and FSE acquisition requirements through AFPA.

3.3.3. Coordinate with MAJCOM Vehicle Management to ensure compliance with the Energy Policy Act and Executive Orders goals.

3.3.4. MAJCOMs Storing FSE will:

3.3.4.1. Designate storage bases, allocate space, prescribe command reporting procedures, and administer a management program.

3.3.4.1.1. Provide recurring inspection and maintenance guidance for all assigned equipment.

3.3.4.2. Calculate specific FSE personnel and equipment requirements to support current AF planning guidance. Maintain source documents until completion of the next validation.

3.3.4.3. Ensure all bases storing or using FSE will include status information in their monthly Air Expeditionary Force Reporting Tool (ART) report.

3.3.4.4. Ensure UTCs JFDAE, JFDES, JFDEC, JFDLA will be inventoried IAW Logistics Detail Listing (LOGDET) and functionally checked annually.

3.3.4.5. Ensure Functional checks will be documented on applicable forms. **Note:** Functional checks will include, but are not limited to equipment operation, Precision Measurement Equipment Laboratory calibration and shelf-life expirations.

3.3.4.6. Program for fiscal year funding through appropriate agencies.

3.3.4.7. Develop procedures to obtain up-front money for reconstitution.

3.3.4.8. Ensure all bases submit an AFTO Form 375, *Selected Support Equipment Repair Cost Estimate*, to ACC/A4RX when requesting disposition instructions for turning in equipment and bladders to the Defense Reutilization and Marketing Office.

3.4. Plans and Programs.

3.4.1. Participate in energy conservation programs IAW current environmental legislation.

3.4.2. Provide guidance and consolidates base level Alternative Fuel Compliance Plans (AFCP).

3.4.3. Certifies vehicle/HUR revalidations to ensure they are accurate and adequately supported.

3.4.4. Develop fuels support for contingency wartime plans.

3.4.5. Validate the War Consumable Distribution Objective (WCDO) document, and the Inventory Management Plan (IMP).

3.4.6. Develop fuels wartime requirements in accordance with the War & Mobilization Plan (WMP).

3.4.7. Reviews command product levels and ensure bases maintain a current copy of their IMP.

3.5. Safety and Deficiencies.

3.5.1. Validate the initial base FMT mishap report and update status within 24 hours or next duty day if spill occurred on a weekend or holiday. Ensure all bases within their command report all mishaps as pre-defined.

3.5.2. Validate mishap reports and provide updates within 30 days through the AFPA Automated Mishap Reporter regarding final outcome of the investigation.

3.5.3. Will provide guidance on mishap reporting for exercise inputs.

3.5.4. Forward mishap reports to NAF and Sub-Area Petroleum Office (SAPO) as required.

3.5.5. Will notify AFPA Technical Division (via telephone within 6 hours of a contaminated or off-specification incident) with follow-up electronic communication or email within 24 hour period.

3.6. Aerial Bulk Fuel Delivery System (ABFDS)/Forward Area Refueling Point (FARP).

3.6.1. AFSOC/A4RE will certify programs and qualify the initial cadre, including trainers of personnel at each new FARP location prior to teams' initial commitment date.

3.6.2. MAJCOMs providing ABFDS capability will:

3.6.2.1. 1. Forecast and submit annual ABFDS crew flying hour (man-year) requirements IAW AFI 11-402, *Aviation and Parachutist Service, Aeronautical Ratings and Badges*.

3.6.2.2. Submit flying hour request through their respective MAJCOM Flight Management office for validation.

3.6.2.3. MAJCOM/A3T will coordinate and validate the request for man-years with MAJCOM A4R. Note: AF/A3O-AT approves/disapproves man-year requests and sends response back to MAJCOM A3T and local Host Aviation Resource Manager (HARM) Office.

3.6.2.4. Manage command level programs for ABFDS.

Chapter 4

LOGISTICS READINESS SQUADRON (LRS) AND OTHER AGENCIES

4.1. LRS Commander (LRS/CC) General Responsibilities.

4.1.1. Appoints the Fuels Responsible Officer (RO) IAW DoD 4140.25-M, *DoD Management of Bulk Petroleum Products, Natural Gas, and Coal,* AFI 23-111, *Management of Government Property in Possession of the AF,* and DLA Energy Policy. Individuals must complete the Petroleum Logistics Management Course (PLMC) and the DLA Energy RO Course prior to being appointed as an RO.

4.1.1.1. Ensures that contractor-operated bases' Terminal Managers (TM), and PAs are assigned IAW DoD 4140.25-M and DLA Energy Policy. Care and safekeeping of government property is assigned to the contractor by contract IAW DoD 4140.25-M. In addition, the Quality Assurance Evaluator (QAE) or Contracting Officer Representative (COR) will not perform duties of an RO. QAE/CORs will only serve as PAs at Government-Owned, Contract-Operated (GOCOs) with contractor managed FMTs.

4.1.1.2. At GOCO locations, the squadron commander/equivalent will nominate in writing an E-6 or above or civilian equivalent to serve as PA to exercise those responsibilities identified in DoD 4140.25-M. Personnel serving as a PA must have completed PLMC and the DLA Energy RO course.

4.1.2. Budgets for all Designed Operations Capability (DOC) statement and AEF tasked UTCs mission readiness training requirements.

4.1.3. Provides personal protective and safety equipment.

4.1.4. Ensures base fuels personnel will not be assigned as escorts for fuel deliveries to areas outside the Fuels Manager's/Superintendent's span of control. These escorts will be assigned IAW AFI 23-204.

4.1.5. Uses AS 016, Part B, to ensure ABFDS and FARP specialists receive the personal equipment in **Attachment 9**.

4.1.6. Designates fuels flight smoking areas with fire department coordination.

4.2. Defense Logistics Agency Energy (DLA Energy).

4.2.1. Serves as the World-wide Integrated Materiel Manager (IMM) for bulk petroleum products IAW DoDD 4140.25, *DoD Management Policy for Energy Commodities and Related Services, and is the Executive Agent (EA) for Bulk Petroleum IAW DoD Directive 5101.8, DoD Executive Agent (DoD EA) for Bulk Petroleum.*

4.2.2. With their regional offices monitors customer activity, capability, and operating practices for CONUS locations.

4.2.3. Has a COCOM Joint Petroleum Office (JPO) which provides assistance to DLA Energy for IMM responsibilities for OCONUS locations.

4.2.4. Furnishes DD Form 448, *Military Interdepartmental Purchase Request* (MIPR), for recurring environmental expenses and SRM IAW DoD 4140.25-M.

4.2.5. Provides Centrally Managed Programs (CMP) for Capitalized products such as:

4.2.5.1. API 510/Filter Separators

4.2.5.2. Cathodic Protection (CP)

4.2.5.3. Dredging

4.2.5.4. Hydrants (Maintenance/Tune-Ups)

4.2.5.5. Marine Loading Arms

4.2.5.6. Piers/Marine Structures

4.2.5.7. Pipeline Integrity Management Program (PIMP/570)

4.2.5.8. Tanks (API 653/STI)

4.2.5.9. Demolition

4.2.5.10. Rail (Rail Road Track Systems) **Note:** For example: DLA Energy inspects, deactivates tanks, and removes tank bottoms and sludge for capitalized tanks under the CMP.

4.2.6. DLA Energy establishes procedures for processing special fuels.

4.3. Base Civil Engineer (BCE).

4.3.1. Maintains permanently installed fuels facilities and equipment, and provides 24-hour maintenance support.

4.3.1.1. Performs corrosion control on fixed facilities.

4.3.1.2. Maintains a war reserve level on fixed system filter separator elements.

4.3.2. Provides a detailed base "Liquid Fuel System" schematic as requested.

4.3.3. Provides detailed schematic charts and coordinates with FMT for Operating Instructions (OI) for each permanently installed fuel facility.

4.3.4. Provides certified base pipeline inventories (capacity in US gallons) and strapping charts (in 1/16-inch increments and US gallons) for each pipeline/fuel tank designated by FMT.

4.3.5. Paints, marks and color codes permanently installed fuel facilities to comply with MIL-STD-101B, *Color Code for Pipelines and for Compressed Gas Cylinders*, MIL-STD-161G, *Identification Methods for Bulk Petroleum Products Systems Including Hydrocarbon Missile Fuels* and AFOSHSTD 91-501 *AF Consolidated Occupational Safety Standard*.

4.3.6. Provides emergency power for fuels facilities IAW AFI 32-1063, *Electrical Power Systems*.

4.3.7. Reviews/develops the DD Form 1391, *Military Construction Project Data,* for DLA MILCON projects and reviews SRM projects and forwards to MAJCOM fuels engineers, programmers and fuels management staffs.

4.3.8. MAJCOM Civil Engineers and BCE installation staffs involved in SRM process will obtain a SRM-E account and keep the SRM-E database updated with all deficiencies and supporting information to allow DLA Energy to properly forecast funding requirements.

4.3.9. Provides or contracts vegetation control and grass cutting in fuels management areas (includes dikes and cut and cover tanks).

4.3.10. Provides secondary containment that is impermeable to petroleum products at all primary loading and unloading facilities and for all above ground tanks IAW UFC 3-460-01, *Design: Petroleum Fuels Facilities*, AFI 32-7044, *Storage Tank Compliance*, and with federal, state, and local environmental laws/regulations.

4.3.11. Ensures collection and storage of used or recoverable fuels will be handled by the BCE IAW AFI 23-502 and in compliance with federal, state, and local environmental laws/regulations and AF Policy Directives and Instructions.

4.3.12. Works in coordination with Fuels Management, to establish a winterization program to remove snow and prevent water accumulation in tank roof drains.

4.3.13. Provides cold weather locations with an indoor preventive maintenance facility.

4.3.14. Provides covered structure for refueling units in cold weather and heavy snowfall areas; submits a work request for heated facilities to park refueling units.

4.3.15. Provides a covered roof over liquid oxygen (LOX) and liquid nitrogen (LIN) storage tanks.

4.3.16. Under normal conditions, inspects, cleans or deactivates tanks and removes tank bottoms and sludge for fuel tanks as required. **Note:** Fuels Management Flight personnel will not assist in removing manhole covers or engage in any task associated with tank inspection or cleaning. See T.O. 37-1-1, *General Operation and Inspection of Installed Fuel Storage and Dispensing Systems*.

4.3.17. Provides protective fencing that secures storage facilities.

4.4. Aircraft Maintenance.

4.4.1. Coordinates refueling support requirements with Fuels Service Center (FSC) and schedules maintenance activities to minimize any delay of refueling support during aircraft servicing operations.

4.4.2. Provides weekly flying schedules and promptly notifies the FSC of schedule changes.

4.4.3. Assists fuels personnel in positioning fuel servicing vehicles/equipment used for aircraft servicing.

4.4.4. Connects/disconnects Single Point Receptacle (SPR) nozzles and performs safety of attachment check.

4.4.5. Assists in filling LOX and LIN servicing carts, by performing safety man duties outside of normal local servicing hours.

4.4.6. Establishes aircraft fuel servicing priorities, when not outlined in the In-Garrison Expeditionary Site Plan (IGESP).

4.4.7. Ensures aircraft are parked or towed to hydrant outlets, enabling maximum efficiency of hydrant systems.

4.4.8. Segregates and recovers petroleum products drained from aircraft and support equipment IAW T.O. 42B-1-23.

4.4.9. Develops procedures and trains personnel on preventing commingling and introduction of liquid or solid wastes into collection containers.

4.4.10. Coordinates with FMT to recover and reclaim as much petroleum products as possible, prior to product disposal.

4.4.11. Provides reason for defuels, estimates quantity, determines if contamination is suspected and gives proper fuel grade to the FSC.

4.4.11.1. Prior to defuel, verifies the last grade of fuel serviced to the aircraft by checking AFTO Form 781F, *Aerospace Vehicle Identification Document.* **Note:** Notify FSC prior to starting defuel operation if aircraft was fueled with JP-8+100 or any grade other than the grade identified at time of dispatch.

4.4.12. Provides the following cryogenic servicing cart operation and maintenance:

4.4.12.1. Ensures the using organization maintains carts to include purging and pulling vacuum.

4.4.12.2. Ensures carts meet safe operating conditions using AFTO Form 244/245, *Industrial/Support Equipment Record.*

4.5. Wing Safety Office and Base Bioenvironmental Engineering (BEE).

4.5.1. Performs annual safety inspections of the Fuels Flight and other inspections when requested by FMT.

4.5.2. BEE performs required surveys and inspections when requested by FMT.

Chapter 5

DUTIES OF THE FUELS MANAGEMENT TEAM

5.1. FMT General Responsibilities.

5.1.1. The FMT is comprised of the Fuels Management Flight Commander (FMFC) and the Fuels Manager (FM) or FMFC and Superintendent. These individuals are trained to maintain command and control, and together they are charged with the following responsibilities as an FMT:

5.1.1.1. Improves fuels management quality and capabilities.

5.1.1.2. Ensures quality bulk petroleum, cryogenic, gases and hypergolic products are issued safely and efficiently to using organizations under FMT span of control.

5.1.1.3. Manages the requisition, receipt, storage, issue, quality and accounting of bulk petroleum, cryogenic, gases and hypergolic products.

5.1.1.3.1. Forecasts, reports, and submits all fuels, cryogenics, gases and hypergolic requirements applicable to each location to respective MAJCOM.

5.1.1.4. Develops and validates IGESPs for the following categories: operational, contingency, and exercises.

5.1.1.5. Ensures that at single integrated operational plan or nuclear command control locations has a minimum of two members of management that have a TOP SECRET security clearance.

5.1.1.6. Waiver requests to this instruction must go through FMT respective MAJCOM. Each request must:

5.1.1.6.1. Explain all circumstances that prevent compliance with this instruction.

5.1.1.6.2. Define the exact limits of the waiver.

5.1.1.6.3. Specify waiver duration, to include termination date.

5.1.1.6.4. Describe alternate procedure and explain how it will ensure safety.

5.1.1.7. Establish vehicle, equipment, and facility minimum essential levels (MEL). **Note:** Coordinate facility levels with Water and Fuels System Maintenance (WFM) and vehicles levels with Vehicle Maintenance.

5.1.1.8. Coordinates with MAJCOM Fuels Engineer, MFMs and local BCE on scheduled maintenance and tank cleaning.

5.1.2. **Preventing Fuel Commingling.**

5.1.2.1. Provides and uses a product selection device (different size couplers and nozzles) or lock control system when handling more than one grade of fuel.

5.1.2.2. Ensures that if the tank contains a common receipt/issue line, defueled product is displaced into the tank prior to re-issuing.

5.1.2.3. Does not permit the return of fuel through gauging hatches.

5.1.3. **Handling Contaminated and Off-Specification Fuel Products.**

5.1.3.1. Informs LRS commander, affected agencies, and agencies listed in T.O. 42B-1-1.

5.1.3.2. Immediately notifies MAJCOM (via telephone within 2 hours of the incident) and submits a follow up electronic message within 24 hours of occurrence with an info copy to AFPA Technical Division.

5.1.3.3. Ensures MAJCOM and AFPA are contacted to get disposition instructions for off-specification product or fuel/water mixtures of 25 gallons or more.

5.1.4. **Aerial Delivery Fueling Operations**

5.1.4.1. For ABFDS:

5.1.4.2. Works in conjunction with the LRS/CC:

5.1.4.3. Submits man-year forecast IAW AFI 11-402, Aviation and Parachutist Service, Aeronautical Ratings and Badges, to local HARM office NLT June each year.

5.1.4.4. Routes request to Mission Support Group Commander for endorsement. **Note:** The local HARM office will review request for man-years and forward the request to the MAJCOM A3T.

5.1.4.5. Requests/Submits for Aeronautical Orders to the local HARM office for ABFDS crews, upon being tasked to support UTC JFABF. Further guidance is provided in AFI 11-402.

5.1.4.6. For FARP:

5.1.4.6.1. Conducts initial interviews with all prospective FARP operators.

5.1.4.6.2. Ensures adequate personnel are designated and trained to meet 24-hour mission readiness requirements.

5.1.4.6.3. Ensures all FARP policies from AFSOC/A4RE or ACC/A4RE are implemented. **Note:** FARP is a primary duty. AFSOC SOCOM funded FARP personnel will not be assigned duties that interfere with FARP requirements.

5.1.4.6.4. Appoints FARP certifiers in writing.

5.1.4.6.5. Provides covered storage area for FARP servicing equipment and secured storage for FARP personnel equipment.

5.1.4.6.6. Ensures operators meet all requirements in paragraph 5.1.4.7., are current in required training, and fully qualified.

5.1.4.7. Verifies the operational requirements for ABFDS/FARP operators:

5.1.4.7.1. Are qualified fuels specialists, AFSC 2F0X1, MSgt and below.

5.1.4.7.2. Meet ASC9C flying duty qualification standards.

5.1.4.7.3. Are Classified with an Aviation Service Code of 9C (Operations Support)

5.1.4.7.4. Are cleared via Annual 9C Flight Physical.

5.1.4.8. Verifies ABFDS/FARP operators have completed the following training:

5.1.4.8.1. Physiological training completed (Every 5 years).

5.1.4.8.2. Small Arms Training (9mm).

5.1.4.8.3. M16 and/or M4 for (FARP only).

5.1.4.8.4. Isolated Personnel Report (ISOPREP Card).

5.1.4.8.5. Life Support Equipment Training.

5.1.4.8.6. Aircraft Ground Egress Training (FARP only).

5.1.4.8.7. Night Vision Device Training (FARP only).

5.1.4.8.8. Both ABFDS/FARP operators should complete Survival, Evasion, Resistance, and Escape (SERE) initial and refresher training for enlisted and non-rated aircrew IAW AFI 16-1301, *Survival, Evasion, Resistance, and Escape (SERE) Program* as available. Operators can also take Evasion, and Conduct after Capture (ECAC) course, **https://etca.randolph.af.mil**/ using course #S-V88-AL to satisfy this requirement. Another option is to take the Local Area Survival (LAS) course taught by a local SERE instructor and then document accomplished training via AF Form 623. Completing any of the courses listed here will satisfy this training requirement. **Note:** ABFDS operators will be briefed by the aircrew prior to the flying mission on egress procedures.

5.1.5. **MILCON and SRM Projects.**

5.1.5.1. Obtains an SRM-E account and begin using the DLA Energy SRM-E system to monitor deficiencies.

5.1.5.2. Appoints in writing a person to monitor and track progress for all SRM/MILCON projects and coordinate with BCE.

5.1.5.3. Validates the operational requirements of each project.

5.1.5.4. Reviews the DD Form 1391, *Military Construction Project Data*, for DLA MILCON projects and reviews SRM projects prior to BCE submission and forwarding to MAJCOM fuels engineers, programmers and FMT Staffs.

5.1.5.5. Includes complete justification according to DoD 4140.25-M.

5.1.6. **Fuels Vehicles and FSE.**

5.1.6.1. Will develop written procedures for authorizing and validating mobile vehicle servicing requests to facilitate vehicle requests requiring mobile refueling.

5.1.6.1.1. Determines which vehicles may be serviced by mobile fueling units during contingencies or exercises.

5.1.6.2. Ensures general purpose/special purpose vehicles use the military service station as the primary method of refueling when practical.

5.1.6.2.1. General Purpose Vehicles. These vehicles will refuel at the base service station, local vendor, organizational issue tank, or by mobile refueling unit when approved by the FMT.

5.1.6.2.2. Special Purpose Vehicles. Use a mobile refueling unit to service special purpose vehicles and Material Handling Equipment (MHE) that cannot easily access or travel to the base service station due to body design or propulsion method.

5.1.6.2.3. Vehicle Identification Link (VIL) keys for flex fuel vehicles will only be encoded with the appropriate alternative fuel code when the required alternative fuel type is available on base. **Note:** Flex fuel vehicle VIL keys should be temporarily recoded with appropriate alternative fuel codes when the vehicle is used for travel where alternative fuel is not available.

5.1.7. **Alternate Use of Fuel Servicing Units.**

5.1.7.1. Obtains MAJCOM approval to use aviation fuel vehicles to issue ground products.

5.1.7.2. Notifies MAJCOM within one duty day when using fuel servicing units to assist in environmental clean-up operations for natural disasters or humanitarian efforts. **Note:** In both cases, before returning units back to normal service, FMT must ensure they meet quality control requirements outlined in T.O. 42B-1-1, *Quality Control of Fuels and Lubricants*.

5.1.8. **Computing Refueling Equipment Authorizations.**

5.1.8.1. Uses AS 010, *Vehicle Fleet (Registered)*, in conjunction with the Aircraft Servicing Capability (ASC) program to calculate vehicle authorizations.

5.1.8.2. Performs vehicle validation upon request from the local Vehicle Management Flight (VM) or if mission changes warrant revalidation. **Note:** Mission changes can include factors that affect Per Accomplishment Time (PAT) times, loss or gain of aircraft, and new or moved facilities etc.

5.1.8.3. Coordinates validation through the VM; the MAJCOM Fuels Office will validate all packages and forward them to the MAJCOM Vehicle Management Office.

5.1.8.4. Maintains source documents until the completion of the next validation.

5.1.8.5. Refers to the vehicle validation procedures located on the AFPA Community of Practice (CoP) for step-by-step instructions. **Attachment 14** lists additional information when performing vehicle validation calculations.

5.1.9. **Store, Maintain, Inspect, and Deploy FSE.**

5.1.9.1. Stores all equipment inside when possible. In allocating inside storage, give priority to rubber products and filter-separator elements. When inside storage space is not adequate use covered outside storage. In both cases, provide dust covers for all openings in valves, hoses, nozzles, and equipment items.

5.1.9.1.1. Maintains a separate AFTO Form 95, *Significant Historical Data*, for each bladder until removed from service.

5.1.9.2. Contacts ACC/A4XW as required for document retention and disposition.

5.1.9.3. Stores bladders IAW T.O. 37A12-15-1, *Collapsible Fuel Bladders*. **Note:** Stencil the bladder serial number and manufacture date on the exterior if crate is used to store bladders.

5.1.9.3.1. Ensures storage locations request replacement bladders as needed when bladders are initially wetted with fuel.

5.1.9.4. Stores and maintains FARP equipment IAW Forward Area Manifold (FAM Cart) Manual.

5.1.9.5. Provides recurring inspection and maintenance on stored FARP assets. Equipment will be stored ready for deployment. Any deviation of equipment or down time will be reported to AFSOC/A4RE, and host MAJCOM.

5.1.9.6. Provides recurring inspection and maintenance for all assigned equipment.

5.1.9.7. Uses equipment end item technical data and T.O. 37A-1-101, *USAF Fuel, Water and Lubricant Dispensing Equipment* for operation, servicing, and maintenance of air transportable fuel systems.

5.1.9.8. Uses FAM Cart Manual for operating, servicing, and maintaining FARP equipment.

5.1.9.9. Prepares/inspects FSE equipment for deployment:

5.1.9.9.1. Charges the batteries, run engines, visually inspect bladders, and places bladders in cradles, crates or on pallets.

5.1.9.9.2. Inspects and leak checks ABFDS bladders according to T.O. 37A-1-101.

5.1.9.9.3. Inspects and prepares FARP equipment IAW FAM Cart Manual.

5.1.9.9.4. Prepares equipment for shipment IAW AF Inter-service Manual AFMAN 24-204 (I), *Preparing Hazardous Materials for Military Air Shipments.*

5.1.9.9.5. Deploys all equipment records IAW AFMAN 23-110. Be sure to keep a copy of the originals in case others are lost in shipment.

5.1.9.10. FSE Set-up.

5.1.9.10.1. Uses AFPAM 23-221 for executing fuel support operations particularly at other than main operating bases. Locates and installs FSE based on:

5.1.9.10.1.1. The airfield layout and type of aircraft supported

5.1.9.10.1.2. The resupply source.

5.1.9.10.1.3. Aircraft taxi and/or tow capability.

5.1.9.10.1.4. The layout of roads and water channels.

5.1.9.10.1.5. Other facility limitations.

5.1.9.11. Uses PMU-27 and/or TASS UTCs to support ground fuels.

5.1.9.12. Site plan the cryogenics facility to minimize the travel time and distance flight line servicing units' move for refilling; provides accessibility for tank truck deliveries; and complies with distance criteria of AFMAN 91-201, *Explosives Safety Standards*.

5.1.10. **Using FSE for Exercise Support.**

5.1.10.1. When planning to use fuels support equipment for any reason other than Operational Plans (OPLANs), bases must review the constraints of AFI 25-101.

5.1.10.2. Submits written requests to parent MAJCOM FMT Office. **Note:** The unit does not need to contact the MAJCOM when requesting FARP UTCs.

5.1.10.3. Requests must:

5.1.10.3.1. Provide purpose of intended use and 10 working days advance notice when practical.

5.1.10.3.2. Use UTCs construct to identify equipment and personnel when possible. UTCs may be tailored to suit the using organizations requirements.

5.1.10.3.3. Provide the in-place date at deployment location and length of loan.

5.1.10.3.4. Provide the full name, unit of assignment, and DSN phone number of the person(s) responsible for receiving, maintaining, and returning the equipment.

5.1.10.3.5. List fund cites for transportation, FSE reconstitution, and TDY of operator personnel IAW AFI 25-101, when requested. **Note:** IAW AFI 25-201, *Support Agreements Procedures*, reconstitution will include the "up front" expense of associated MRSP, fuel bladders, batteries, and any other items that will require maintenance, repair, or replacement.

5.1.10.3.6. Forward special transportation information. Dedicated airlift is the preferred mode of transport.

5.1.10.3.7. Provide complete address of deployment location and on-site point of contact telephone numbers.

5.1.10.3.8. Ensure that notification of deployment is submitted to AFSOC/A4RE within 24 hours of receipt of tasking for FARP personnel and/or equipment for exercises/contingencies that will require more than 24 continuous hours away from home station.

5.1.11. **Maintaining War Reserve Cryotainers.**

5.1.11.1. Verifies storage tanks held in war reserve status are completely serviceable.

5.1.11.2. Maintains an overboard vent system (OVS) for each 400-gallon cryogenic tank listed on the DOC statement IAW T.O. 37C2-8-1-127, *Liquid Oxygen/Nitrogen Overboard Vent System.*

5.1.11.3. Stores the OVS in a locked box or footlocker, and documents inventories annually.

5.1.11.4. Prepares air transportable cryogenic storage tanks for shipment.

5.1.11.5. Ensures an approved static grounding reel is affixed on each 400-gallon tank.

5.1.11.6. Consults T.O. 37C2-8-1-127 for OVS instructions for air shipment.

5.1.11.7. Paints, marks and maintains corrosion control on all cryogenics storage containers: IAW T.O. 35-1-3, *Corrosion, Prevention, Painting and Marking of USAF Support Equipment (SE)*.

5.1.11.8. Positions decals and markings IAW applicable publications.

5.1.11.9. Requisitions decals IAW applicable standards. Locate decal part numbers in the applicable storage container dash 4 T.O. illustrated parts breakdown.

5.1.12. **Reducing Cryogenic Losses.**

5.1.12.1. Reports cryogenic tanks that cannot efficiently store product to the MAJCOM.

5.1.12.2. Limits fill periods to minimum number required to support mission.

5.1.12.3. Only fills carts required for aircraft servicing. Encourages using organizations to keep active carts to a minimum, and maintain other carts in a purged, stand-by status.

5.1.12.4. Keeps active tanks as full as economically possible.

5.1.13. **Plans and Programs.**

5.1.13.1. Establishes Fuels Operating Instructions (FOI) and checklists**.** Assign individual identification numbers to FOIs and checklists, FMT must document review annually. Use the following guidelines when developing: **Note:** The referenced FOIs are directive in nature and should be developed in accordance with AFI 33-360, *Publications and Forms Management*, and unit level guidance issued by the local publications manager.

5.1.13.1.1. Writes FOIs to provide local procedures.

5.1.13.1.2. Do not duplicate information contained in other directives unless necessary to consolidate or emphasize.

5.1.13.1.3. All locally developed checklists by FMT are "Mandatory for Use".

5.1.13.1.4. Checklists:

5.1.13.1.5. Write checklists in a simple, concise and comprehensive manner.

5.1.13.1.6. Keep them one page long, if possible.

5.1.13.1.7. Must include emergency action procedures at the beginning of the checklist.

5.1.13.1.8. Make them bilingual, if necessary. **Note:** Follows guidance in T.O. 00-5-1, *AF Technical Order System*, on preparing and numbering checklists.

5.1.13.2. Establishes a formal written agreement with, the installation weather detachment, the Maintenance Operations Center (MOC) and/or base operations to receive weather warnings at bases without automatic weather warning equipment; then staffs the agreement through applicable Squadron/CCs.

5.1.13.3. Establishes a Lockout/Tagout Program (LOTO) IAW AFOSHSTD 91-501.

5.1.14. **Designed Operational Capability (DOC) Statements.**

5.1.14.1. Reviews the DOC statements annually to ensure the ability to support the requirements. The DOC statement is the baseline for Status of Resources and Training System (SORTS) reporting. Ensure fuels personnel are familiar with current requirements.

5.1.14.2. Refers to AFI 10-401 on how UTCs are used during war planning. **Note:** The Man Power and Equipment Force Packaging System (MEFPAK) Tool contains the most current description for fuels UTCs.

5.1.15. **Preparing Required Reports.**

5.1.15.1. Report SORTS IAW AFI 10-201, *Status of Resource and Training System*.

5.1.15.2. Provides the Bulk Petroleum Contingency Report (REPOL) as directed.

5.1.15.2.1. The Joint Chiefs of Staff (JCS) web-based REPOL is the sole authoritative source for contingency data**.**

5.1.15.2.2. The REPOL report provides DLA Energy, Joint Staff, COCOM, CSAF, AF/A4LE, AFPA and the MAJCOMs with summary information on damage and deficiencies affecting bulk petroleum supplies, storage and distribution systems.

5.1.15.2.3. Submit REPOL reports IAW CJCSM 3150.14B, *Joint Reporting Structure Logistics* or when requested. Additionally, the JCS web-base REPOL will be used for all MAJCOM inspections and exercises to demonstrate proficiency in submitting reports.

5.1.16. **Preparing Fuel Support Plans.**

5.1.16.1. Uses AFI 10-404, AFI 10-401 and AFPAM 23-221 as a guide when preparing fuels appendices to the base war support plan, operation plans and mobility support plans. Basic references required to prepare a valid support plan include:

5.1.16.1.1. Inventory Management Plan (IMP) extract.

5.1.16.1.2. Aircraft Parking Plan.

5.1.16.1.3. Base Wartime Aircraft Activity (WAA) Report.

5.1.16.1.4. Air Mobility Command minimum ground times.

5.1.16.1.5. Time-Phased Force Deployment Data (TPFDD).

5.1.16.1.6. Integrated Consumable Item Support (ICIS) fuels module.

5.1.16.2. Reviews the War and Mobilization Plan (WMP).

5.1.16.3. Coordinates with LRS Readiness Flight to review the WMP, Vol. IV, Wartime Aircraft Activity (WAA) Report to ensure FMT can support the aircraft activity listed.

5.1.17. Not Use.

5.1.18. **Maintaining Prepositioned War Reserve Stock (PWRS)**

5.1.18.1. Reviews IMP IAW DoD 4140.25-M; found on the DLA Energy SIPR website. **Note:** PWRS for non-petroleum products. Refer to AFI 25-101, *War Reserve Materiel (WRM) Program Guidance and Procedures*.

5.1.18.2. Maintains LOX/LIN WCDO levels through in-house production and/or a commercial source.

5.1.18.3. Reports minimum inventory penetrations IAW DoD 4140.25-M; forward an information copy to parent MAJCOM Fuels Office.

5.1.18.4. Determines maximum (MAX) 1 day requirements:

5.1.18.5. Coordinates with LRS Readiness Flight to obtain MAX 1-day requirements.

5.1.18.6. Develops local procedures for processing classified reports.

5.1.19. **Bases with FARP Teams.**

5.1.19.1. Will provide AFSOC/A4RE or ACC/A4RE and their parent MAJCOM a FARP report using the approved AFSOC/ACC format. This weekly report is due every Thursday and must be certified by the FMFC. If flight does not have an available or assigned FMFC, report must be certified by the Fuels Manager.

5.1.19.2. Prepares Defense Readiness Reporting System (DRRS) Reports as required.

5.1.20. **Selling Aviation Products to Contract, Charter and Civil Aircraft.**

5.1.20.1. Understands DLA Energy Policy outlines the guidance for cash sales of DLA Energy owned product.

5.1.20.2. Determines if credit sales are not authorized; follow the guidance in DoD 4140.25-M and/or DLA Energy Policy for performing a cash sale.

5.1.20.3. Appoints personnel in writing authorized to collect cash obtained from these sales IAW DoDFMR 7000.14-R, *Disbursing Policies and Procedures.*

5.1.20.4. Provides methods/procedures for the safekeeping of cash IAW AFI 31-101. **Note:** Off-duty personnel will not safeguard money collected from cash sales.

5.1.21. **Managing Contracted Fuel Operations**

5.1.21.1. Ensures contractors maintain fuels accounting records IAW contract provisions, DoD 4140.25-M and DLA Energy Policy.

5.1.21.2. Understands the COR, QAE and/or PA for contracted locations, work for the Air Force and/or DLA Energy contracting office to:

5.1.21.2.1. Perform a technical review of contracts to ensure quality fuel support.

5.1.21.2.2. Review and recommends the acceptance or denial of service providers quality control plan to the Contracting Officer.

5.1.21.2.3. Provide oversight/quality assurance monitoring for service provider activities IAW the performance plan.

5.1.21.2.4. Should enlist the assistance of BCE during COR compliance and surveillance of contract maintenance requirements.

5.1.21.3. Ensures contractor performance is IAW applicable Occupational Safety and Health Administration (OSHA), Air Force Occupational Safety & Health (AFOSH), DoD and AF TOs and publications.

5.1.21.4. Coordinates all base fuels service contracts with MAJCOM FMT and AFPA.

5.1.21.5. Verifies the contract specifies:

5.1.21.5.1. Employee training and qualification meets Air Force Specialty Code (AFSC) 2F0X1 CFETP requirements for each duty position.

5.1.21.5.2. The requirement for and approval of a quality control plan.

5.1.21.5.3. Performance requirement documents or performance work statements comply with applicable sections in this instruction, DoD 4140.25-M, DLA Energy Policy and AFI 31-601, *Industrial Security*.

5.1.21.5.4. The use of Air Force Green Procurement Program language.

5.1.21.5.5. Act as single point of contact for coordinating, controlling and directing fuel servicing operations. Ensuring customer requirements are fulfilled in a timely manner and off-specification or wrong grade of product is not issued to aircraft, equipment or vehicles.

5.1.21.5.6. Permits evaluations by HHQ teams. For example: IG, LCAP, ESHOCAMP, Fuels Infrastructure Assessment Teams, and external agencies inspections. **Note:** Evaluations listed are for reference and other required inspections under this section should be spelled out in contract performance plans.

5.1.21.6. Ensures personnel filling COR, QAE, and/or PA positions must be qualified to (AFSC) 2F071, equivalent level or higher, and must complete all required training prior to appointment to include annual training requirements for AF/DLA Energy contracts.

5.1.21.6.1. Ensures CORs, QAEs, and any individuals responsible for procuring goods and services, must complete Green procurement training through the Defense Acquisition University on-line course, *CLC 046 Green Procurement.*

5.1.21.7. Knows the COR may also serve as the PA if appointed; to provide diligent care, custody, and protection of Government property. If the COR is also a PA he or she must attend the formal in-residence DLA Energy RO course and complete PLMC.

5.1.21.8. Ensures the COR, QAE or PA will monitor command and control capabilities to ensure fuel quality standards are met, and physical controls exist to prevent use of unserviceable equipment or product.

5.1.21.9. Ensures for DLA Energy contracts, the COR will not be assigned to the LRS Quality Assurance function. COR/QAE's will conduct surveillances on the service provider IAW the MAJCOM/AFPA coordinated performance plan.

5.1.22. **Developing Alternative Fuel Compliance Plans (AFCP)**

5.1.22.1. Adheres to federal mandates that require the use of alternative fuels. When applicable, develops a combined FMT and VM plan to comply with MAJCOM guidance.

5.1.22.2. Identifies best use/type of alternative fuels.

5.1.22.3. Determines shortfalls in storage and dispensing systems to handle AFCP products.

5.1.22.4. Develops AFCP projects IAW MILCON/SRM rules.

5.1.23. **Controlling Entry and Exit of Petroleum Transport Vehicles**

5.1.23.1. Ensures the Mission Support Group Commander appoints in writing authorized entry and exit gates for fuel and cryogenic transport vehicles, and personnel to serve as delivery escorts.

5.1.23.2. Ensures incoming transport vehicles are inspected IAW DoD 4140.25-M. and/or DLA Energy Policy and are re-inspected before departing the installation. Do not inspect vehicles delivering fuel to the Base Exchange service stations or aero clubs.

5.1.23.3. Ensures delivery documents reflect the date, time inspected, and signature of the inspectors performing the incoming and outgoing inspections. Provide one copy to the carrier and one copy to the FSC for filing.

5.1.23.4. Ensures vehicle escorts are trained on the actual operation they are expected to perform

5.1.24. **Safety and Deficiencies.**

5.1.24.1. Strictly monitors individuals for alertness and situational awareness while performing fuel and/or cryogenic handling operations; especially when mission requirements require personnel to work more than 8 continuous hours.

5.1.24.2. Does not allow untrained personnel to perform fuels or cryogenics operations without task-qualified supervision.

5.1.24.3. Ensures element supervisors provide daily safety briefings, they must include environmental and safety topics.

5.1.24.4. Appoints in writing a Fuels Safety Monitor.

5.1.25. **Providing Protective Equipment and Personnel Clothing**

5.1.25.1. Submits budget request to LRS/CC to provide personal protection equipment (PPE) for fuels personnel:

5.1.25.1.1. Inclement weather gear.

5.1.25.1.2. Hearing protection.

5.1.25.1.3. Safety toe boots.

5.1.25.1.4. Cream or soap to prevent dermatitis.

5.1.25.1.5. Eye protection.

5.1.25.1.6. Fall protection. **Note:** Fall protection equipment is used as outlined IAW safety guidance and task performance. Consider these examples of situations where such equipment is required: confined spaces, Above Ground Storage Tank (AST) gauging, bladder walking etc.

5.1.25.1.7. Specialized gloves, aprons and coveralls for handling hazardous material. This includes tri-layer coveralls identified for use in “wet fuel operations” such as bladder clean-up.

5.1.25.1.8. Coordinates with Wing Safety, BEE, and PMEL for equipment needed to enter toxic environments, i.e., permit required confined spaces, proper equipment to use for fuel vapor detection. **Note:** Consult with BEE on all matters regarding the provision of, or changes to, PPE for workers covered under this instruction.

5.1.26. **Fuels Personnel Safety.**

5.1.26.1. Ensures:

5.1.26.1.1. Personnel safety equipment is properly inspected and used/worn including safety toe boots.

5.1.26.1.2. Personnel are trained on occupational hazards and how to protect themselves.

5.1.26.1.3. Physical examinations for occupational health are performed in a timely manner.

5.1.26.1.4. Personnel receiving, storing, issuing, and sampling petroleum and cryogenic products wear PPE per AFOSH Standards 91-501, and 91-67, *Liquid Nitrogen and Oxygen Safety*, and T.O. 00-25-172, *Ground Servicing of Aircraft and Static Grounding/Bonding*. These items are authorized in AS 016, *Special Purpose Clothing and Personal Equipment*.

5.1.26.1.5. Fuels personnel wear reflective safety devices as required during hours of darkness or reduced visibility.

5.1.26.1.6. Emergency showers and/or eyewashes will be available and maintained IAW AFOSHSTD 91-501.

5.1.26.1.7. Adequate spill clean-up material is available, as determined by FMT.

5.1.26.1.8. Material Safety Data Sheets (MSDS) are available for all chemicals used by Fuels Personnel.

5.1.26.1.9. Safety observers working in the cryogenics area must wear the same level of PPE worn by the fuels specialist performing the task. **Note:** Commercial drivers delivering receipts personnel are only required to don their PPE IAW OSHA requirements.

5.1.26.1.10. Compliance with all applicable OSHA, AFOSH, AFI and DoD Instructions to protect the health of personnel exposed to fuel hazards.

5.1.26.1.11. Compliance with environmental, safety and occupational health standards to improve performance and enhance personnel effectiveness.

5.1.26.2. Develops and implements cost-effective business improvements and process reengineering initiatives to minimize and control environmental, safety and occupational health risks.

5.1.26.2.1. Applies Operational Risk Management (ORM) techniques IAW AFI 90-901, *Operational Risk Management*, to identify and manage risks. **Note:** All Fuels Compliance functions have moved to the LRS-QA Office and are now listed in AFI 20-112.

5.1.27. **Fire Safety.**

5.1.27.1. Implements control measures for smoking materials.

5.1.27.2. Does not allow smoking or use spark/flame-producing devices in any refueling unit, fuel pump house, fuel or cryogenics storage/production area or laboratory (excluding flashpoint tester).

5.1.27.3. Posts and strictly enforces smoking restrictions.

5.1.28. **Controlling Static Electricity.**

5.1.28.1. Ensures personnel adhere to and are familiar with the following items IAW T.O. 00-25-172 as a minimum:

5.1.28.1.1. The nature of static electricity and the hazards of static charges when handling fuels.

5.1.28.1.2. Donning or removing outer garments within the Fuels Servicing Safety Zone. 5.1.28.1.3. The clothing restrictions for performing Fuel servicing.

5.1.29. **Laboratory Safety.**

5.1.29.1. Uses specialized/approved laboratory equipment IAW T.O. 42B-1-1.

5.1.29.2. Ensures Fuels laboratory personnel take precautions to ensure the area is safe for testing.

5.1.29.3. Refers to AFOSHSTD 91-38, *Hydrocarbon Fuels-General* and T.O. 42B-1-1 for further information on lab compliance items.

5.1.29.4. Assigns responsibility in writing to, whoever will manage AF Form 979, *Danger Tags*. **Note:** Fuels caution tag program is covered under the NCOIC Fuels Laboratory.

5.1.30. **Foreign Object Damage (FOD) Prevention.**

5.1.30.1. Implements a FOD prevention program IAW AFI 21-101, *Aerospace Equipment Maintenance Management*.

5.1.30.2. Ensures all fueling equipment is inspected for FOD daily when used.

5.1.30.3. Ensures vehicles that are operated on an unpaved surface are inspected and FOD is removed prior to traveling back onto the flightline.

5.1.30.4. Does not allow driving of refueling vehicles over "FOD shakers".

5.1.31. **Communication with Operators during Fuel Transfers**

5.1.31.1. Ensures two-way communication is maintained between pumping and receiving stations for all fuel transfers.

5.1.31.2. Uses dedicated circuits (hot lines), extra telephone circuits, or outgoing call restrictions to ensure telephone contact in an emergency. Provides a loud bell, ring tone, horn or other signaling device outside and in high noise areas; maintain radio contact, if available.

5.1.32. **Two-Person Policy**

5.1.32.1. Ensures contractor employees, aircraft maintenance technicians or other individuals acting as a second person during fuel or cryogenic operations are knowledgeable of the associated hazards involved with the operation and the corrective actions they are required to take in an emergency (see paragraph 5.1.35.3.).

5.1.32.2. Ensures two people are present when:

5.1.32.2.1. Servicing aircraft.

5.1.32.2.2. Issuing fuel to organizational tanks.

5.1.32.2.3. Entering confined spaces IAW AFOSHSTD 91-25, *Confined Spaces*.

5.1.32.2.4. Gauging and sampling above ground tanks and bladders. **Note:** When manually gauging a floating roof tank from the roof, or when anyone descends to the roof, one person remains on the platform at the top of the tank. In gauging all other types of above ground tanks, one person remains on the ground. (Exception: above ground low profile tanks under 10 ft). Personnel must use a self-contained breathing apparatus when descending onto floating roof tanks with geodesic domes.

5.1.32.2.5. Receiving, issuing, generating or transferring cryogenic fluids.

5.1.32.2.6. Transferring high-pressure gases.

5.1.32.2.7. Off-loading tank cars, rail car, or tank trucks.

5.1.32.2.8. Filling trucks or returning fuel to bulk storage. **Note:** The two-peron requirement does not apply when returning fuel to a storage tank equipped with an operational automatic high-level shut-off valve and the truck has an operational deadman control system. This also does not apply during fillstand operations when equipped with an operational deadman control or Scully-type overfill prevention systems. These "one-person" operations require operators maintain constant contact with the FSC.

5.1.32.2.9. Transferring and receiving fuel requires one person at the transfer point and one person at the receiving point.

5.1.32.2.10. Collecting fuel samples from fixed fuel systems. **Note:** One person takes the sample and the second person is they safety observer while samples are taken.

5.1.32.2.11. Performing laboratory operations IAW AFOSHSTD 91-38.

5.1.33. **Mishap reporting.**

5.1.33.1. Submits an initial mishap report through the AFPA website within 24 hrs (preferably the same day) as the incident occurs as required by AF/A4LE, AFPA, AFI 91-204, *Safety Investigations and Reports,* and AFI 10-206, *Operational Reporting.* **Note:** Submission of the mishap report through the website does not preclude the requirement to report fuel spills to the base Environmental Manager and notification via local command channels. Reports generated through Mishap Reporter may be used for local environmental reporting. Do not submit local exercise inputs to the Mishap Reporter. MAJCOMS will provide guidance on exercise mishap reporting.

5.1.33.2. Provides updates as investigation develops and closes mishaps in a timely manner, but NLT 30 calendar days. Updates must reflect pertinent information and/or investigation results in order; to close a mishap, the update must also clearly state what actions were taken to mitigate reoccurrence. **Note:** If an investigation or repairs will exceed 30 days. Continue to provide update weekly until the mishap has been determined closed by AFPA personnel.

5.1.33.3. Immediately advises AFPA through their respective MAJCOM of any violation that will or may potentially result in a fine or negative mission impact (for example:

notice of failure, notice of violation, State or Host Nation action restricting operations, Environmental Protection Agency actions.)

5.1.33.4. Must identify mishap reports that warrant a PQDR or MDR and will be submitted by FMT through the wing QA or Vehicle Management and Analysis section using the Joint Deficiency Reporting System (JDRS).

5.1.33.5. Forward all generated mishap reports of 25 gallons or more to their respective DLA Energy Region within 24 hrs to satisfy DLA Energy reporting requirements.

5.1.33.6. Formally requests an AFPA/PTOT visit; granting access to the incident location through the respective MAJCOM if mishap circumstances warrant on-site technical evaluation.

5.1.33.7. Reviews/documents all uncorrected vehicle, equipment, and facility discrepancies monthly.

5.1.33.8. Corrects all deficiencies and eliminates their root causes.

5.1.33.9. Engages chain of command to correct unresolved discrepancies as required.

5.1.33.10. If Automated Mishap reporter is unavailable at your location, send Mishap to parent MAJCOM via fax or electronic message using the format provided in **Attachment 11** of this instruction.

5.1.34. **Deficiency Reports (DR)**

5.1.34.1. Will be input into the Joint Deficiency Reporting System (JDRS) that involve fuels equipment or vehicles. **Note:** Types of DRs include, PQDRs or MDRs.

5.1.34.2. Will submit all DRs to the JDRS at **http://www.jdrs.mil**/ flights may also submit reports via Wing Safety Office or Vehicle Management Flight as needed.

5.1.34.3. Will include the AFPA Policy Operations and Equipment e-mail address (**afpet.afl@dla.mil**) in the Informational Address block of the submission.

5.1.34.4. Refers to additional information and procedures on reporting DRs into the JDRS are in T.O. 00-36D-54, *USAF Deficiency Reporting, Investigating and Resolution.*

5.1.35. **Managing Personnel.**

5.1.35.1. Interviews personnel within 30 days of arrival to review qualifications, past experience and future training needs.

5.1.35.2. Reports any training or qualification discrepancies to the Squadron Training Manager.

5.1.35.3. Ensures only task-qualified personnel with AFSC 2F0X1, US civil service, US contract employees, host national military/civilian, or sister service equivalent are permitted to perform fuels or cryogenics operations. Non-fuels personnel may augment as the second person for safety coverage after receiving fuels workplace specific briefing regarding their responsibilities.

5.1.35.4. Designates in writing trained personnel not assigned to the fuels laboratory to draw and analyze fuel samples.

5.1.35.5. Establishes guidance and implements a formal rotational training plan to maintain a balance of skills within the flight.

5.1.35.6. Develops an alert recall plan.

5.1.35.6.1. Prepares and distributes an alert recall plan monthly. Ensures the plan remains current at all times.

5.1.35.6.2. Develops alternate recall plan procedures for communication failure conditions.

5.1.35.7. Ensures FARP SOF-Enablers *will not be used* for any mobility tasking other than FARP requirements. **Note:** FARP operators that are not filling a SOF-Enabler position can still be tasked in traditional AEF taskings.

5.1.35.8. Provides at least 30 days' hands on training prior to attending Fuels Quality Control and BSM-E Inventory Accounting courses.

5.1.35.8.1. Staffs the FSC with a minimum of two personnel with SEI 040. Contracted, ANG and AFRC fuels operations may staff the FSC with one person with SEI 040. **Note:** Contracted and civilian operated FSCs will be staffed by at least one graduate of a DLA Energy FMD course.

5.1.35.8.2. Staffs the fuels laboratory with a minimum of one person with SEI 039. **Note:** Contract and civilian operated fuels laboratories will be staffed by at least one graduate of an Air Force or Fort Lee fuels quality control course.

5.1.35.9. Awards the 039 and 040 SEIs based on prerequisites listed in Air Force Enlisted Classification Directory (AFECD).

5.1.35.10. Ensures locations that store or issue more than one grade of aviation and/or ground fuel will develop written procedures for validating the grade of fuel prior to issue. As a minimum, the person receiving the fuel must verify the grade of fuel by initialing for the product received.

5.1.36. **Responsibilities in the MEP process. Note:** **Attachment 10** contains further information on the MEP process.

5.1.36.1. Should know the MEP provides analytical assistance for fuels functional managers/superintendents to improve productivity and determine standardized manpower requirements.

5.1.36.1.1. Know the AF Manpower Standard (AFMS) for Fuels Management AF Manpower Document (AFMD) 41D1.

5.1.36.2. Evaluates the number of people assigned to the fuels flight.

5.1.36.3. Takes action to identify personnel overages/shortages.

5.1.36.4. Requests manpower to accomplish the mission as necessary.

5.1.36.5. Monitors the Unit Manpower Document (UMD) and Unit Personnel Management Roster (UPMR).

5.1.36.6. Monitors increases and decreases in the unit's authorized strength to ensure the number of people is sufficient to do the job.

5.1.36.7. Reviews the UPMR to ensure it reflects the people assigned against the number of positions authorized on the UMD.

5.1.36.8. Coordinates with the local Manpower Office to correct errors.

5.1.37. **Hypergolic Management**

5.1.37.1. Accounts for liquid missile propellants, cryogenics, hypergolic and gases, and their receipt, storage, transfer and delivery control.

5.1.37.2. Monitors maintenance of facilities and equipment.

5.1.37.3. Ensures fuels and oxidizers operations comply with applicable directives.

5.1.37.4. Approves accounting documentation IAW DLA Energy Policy.

5.1.37.5. Mitigates hazards using the Process Safety Management Program.

5.1.37.6. Monitors compliance with environmental requirements.

5.1.37.7. Monitors maintenance and handling of PPE and self-contained atmospheric protection ensemble, and other hypergolic safety hazards.

5.1.37.8. Ensures adequate resource availability for on-base missile and satellite programs.

Chapter 6

FMT MANAGEMENT OF FUELS FACILITIES, TOOLS, AND EQUIPMENT ITEMS

6.1. Facility Management.

6.1.1. For fuels facilities, tools and equipment items the FMT is required to:

6.1.1.1. Follow AFH 32-1084, *Facility Requirements* and UFC 3-460-01 when determining requirements to develop existing or construct new fuel facilities.

6.1.1.2. Submit work requests for BCE to provide facilities IAW AFH 32-1084.

6.2. Securing Fuels Facilities and Equipment.

6.2.1. Ensure, when unattended, the the following is locked:

6.2.1.1. All access and dispensing points on ground fuel equipment to include sump and tank drains in a manner that prevents access to cargo tank contents. **Note:** Fuel bowsers and collection containers will be locked, when not stored/located in a secure area.

6.2.1.2. Dispensing pump nozzles or main power source, except on automated dispensing pumps.

6.2.1.3. Gates of fenced areas within fuels management control when areas are not staffed or under surveillance.

6.2.1.4. Gauge hatches and other access points on all storage and hydrant tanks outside of protected (fenced) areas unless exempted by the base resource protection program manager.

6.2.1.5. Electrical control panels and bulk fuel off-loading systems outside protected areas.

6.2.1.6. Establish proper key control. Magnetic locks are recommended for areas where climatic conditions are severe. Combination locks will not be used on containers that contain bulk fuel products or cryogenics.

6.2.1.7. Institute measures to secure fillstand servicing controls/fueling units IAW T.O. 37-1-1.

6.2.1.8. Ensure installed hydrants, storage sumps, and slop tanks are NOT used to collect or store unrecoverable fuels IAW AFI 23-502.

6.2.2. Obtain written MAJCOM approval if stock listed vehicles and trailers are requested for the collection and transport of unrecoverable fuels or oils. Before returning vehicles to normal service, ensure they meet compliance requirements outlined in T.O. 42B-1-1.

6.3. Maintaining Emergency Power Capability.

6.3.1. Identifiy and coordinate emergency power requirements with BCE.

6.3.2. Establish prepositioned emergency generators at bulk storage, cryogenic production and hydrant facilities.

6.3.3. Establish procedures/agreements to have power provided when prepositioned generators are feasible. **Note:** Only BCE personnel are authorized to verify proper generator connections. Use only qualified personnel to operate generators after connections are complete.

6.4. Establishing the Fuels Laboratory Function.

6.4.1. Establish a base fuels laboratory function to evaluate the cleanliness of fuel and proper operation of fuel-handling systems, for each base handling aviation fuel. **Note:** The area fuels laboratory conducts full specification tests to determine chemical and physical properties of a product.

6.4.2. Use UFC 3-460-01, AFH 32-1084 and AFOSHSTD 91-38 to identify laboratory facility criteria.

6.4.3. Equip a laboratory to perform tests specified by 42-Series TOss for all products handled. Refer to AS 460, *Quality Control Laboratories*, for fuels laboratory equipment.

6.5. Fuel Spill Prevention and Containment.

6.5.1. Ensure all Fuels Management Flight fuel tanks are equipped with high-level alarms and/or automatic high-level shut-off valves. These alarms are in addition to the Fuels Manager automated alarms.

6.5.2. Coordinate with BCE to establish and document safe fill levels for all storage tanks.

6.5.3. Establishes procedures to prevent unauthorized discharge of water containing residual petroleum products or hazardous chemicals that have leached out of the petroleum product.

6.5.4. Coordinate with the base environmental manager to sample and properly dispose of fuel tank dike drainage and tank water bottoms.

6.5.5. Coordinate with BCE to establish procedures for the proper operation, inspection and maintenance of oil/water separators.

6.5.6. Develop local procedures to ensure compliance with AFI 23-502, *Recoverable Fuels.*

6.5.7. Ensure fuels personnel understand responsibilities as outlined in the base Spill Prevention Control and Countermeasures (SPCC) Plan and the base's hazardous material emergency planning and response plan (HAZMAT plan) which addresses federal, state, and local spill prevention and response requirements. **Note:** Ensure each fuels facility has the applicable section of the SPCC printed and posted and available for use.

6.5.8. Notifie the base environmental manager of any changes in fuels operations that may require an amendment to the HAZMAT plan.

6.5.9. Ensure adequate spill prevention and clean-up material is readily available.

6.5.10. Assure that any chemicals or additives injected into DLA Energy fuel is approved/documented IAW T.O. 42B-1-1.

6.5.11. Ensure fuels personnel are present for all inoculations of leak detection chemicals in FMT controlled storage tanks.

6.5.12. Maintain inoculation records IAW T.O. 42B-1-1.

6.5.13. Ensure operator training is provided on installed leak detection systems.

6.6. Hydrant Systems and Efficiency.

6.6.1. Advocate for use of hydrant systems which; are designed to be flexible/efficient modes of refueling aircraft. Use hydrant systems to their utmost potential; systems are designed to primarily refuel and defuel large frame aircraft.

6.6.2. Establish a Hydrant Utilization Rate (HUR). To determine the optimum hydrant to mobile refueler use ratio and ensure hydrant systems are adequately used. HUR will be performed in conjunction with the vehicle validation or as mission changes warrant revalidation. **Note:** Mission changes can include factors that affect PAT times, loss or gain of aircraft, and new or moved facilities etc.

6.6.3. Coordinate the HUR with the Operations Group, Maintenance Group, and the Mission Support Group every three years; then staff to installation commander for approval.

6.6.4. Understand base HUR determination is not required when a MAJCOM or base supplement to this instruction outlines procedures for managing hydrant utilization rates; if supplemented it must be reviewed on a biennial basis.

6.6.5. Will ensure HUR determination includes as a minimum: HUR formula/calculations, manpower factors, statistics, availability of equipment, and sortie rates required to support.

6.6.6. Use the following when determining HUR:

6.6.6.1. Hydrant eligible gallons are quantified as: any aircraft servicing occurring on a hydrant equipped parking spot or any aircraft servicing request that exceeds the capacity of one R-11 refueler (multi-service) that is on a hydrant equipped parking spot will be considered as hydrant eligible. **Note:** To best determine these eligible gallons in this process it is recommended that they are annotated in the remarks block of the control log.

6.6.6.2. Actual gallons moved by hydrants are determined by adding total gallons moved through hydrants: (refuel + defuel) consider defuels as a positive number.

6.6.6.3. HUR is calculated as a percentage by taking the actual gallons moved by hydrants and divided by hydrant eligible gallons equals HUR.

6.6.6.4. Example: If Base X actual gallons moved by hydrants were 378,540 gallons and the hydrant eligible gallons were 400,000. The HUR would be represented as 378,540/400,000=.94635 or 95% HUR. **Note:** Ensure only servicings that occur on aircraft spots with hydrant outlets capable of servicing are used for utilization rate formulas. (For example, if an aircraft lands at a base where the parking plan does not make it possible to be refueled by hydrants, then it should not be considered as hydrant eligible.) Only those aircraft refuels that occur on spots capable of hydrant servicing should be considered.

6.6.7.1. Must send a request package to the MAJCOM before modifying or deactivating hydrant systems that includes:

6.6.7.1.1. Capability of existing system.

6.6.7.1.2. Current and programmed fueling requirements.

6.6.7.1.3. Maintenance cost savings and/or avoidance, possible use of tankage, and proposed method of fueling support.

6.6.7.1.4. Coordinate this request through BCE.

6.7. Cryogenic Facilities.

6.7.1. Designate cryogenics facilities as controlled areas according to AFI 31-101.

6.7.2. Provide the following to ensure a safe, functional, and secure cryogenic facility:

6.7.2.1. Adequate electrical power for production operation and auxiliary equipment are available.

6.7.2.2. Adequate indoor and outdoor lighting to include receiving and servicing areas. Electrical power should be 3 phase, 220 volts, 50/60 cycle.

6.7.2.3. A concrete foundation with non-petroleum based sealant between joints for storage tanks, receiving, and servicing area and servicing cart parking areas. Completely fill the joints with the sealer to prevent the accumulation of dirt.

6.7.2.4. A paved road to and from the facility, capable of supporting commercial cryogenics delivery vehicles and maintenance vehicles, as well as a drive-through capability to permit receipt and issue without requiring the vehicle to backup.

6.7.2.5. A telephone connected to an external system with an audible tone capable of being heard above the noise of the cryogenic operation, and within the tank storage area. Intrinsically safe radios may be used in lieu of telephone at cryogenic facilities that are low use and small in nature.

6.7.2.6. Adequate grounding points for storage tanks and servicing units.

6.7.2.7. An enclosed cryogenic storage facilitie(s) with roll-up style doors for areas with cold weather climates/heavy snowfall. **Note:** For operations involving nitrogen ensure doors remain open during servicing.

6.7.2.8. Ensure that in cold climate locations snow is removed.

6.7.2.9. Develop a local inspection checklist applicable to the LOX/LIN facilities. **Note:** Do not document general cryogenic system area inspection items such as fencing, drip pans, lighting, safety equipment etc., on the AFTO Form 244.

6.8. Tool Management.

6.8.1. Establish tool control program IAW current AFI 23-302, *Vehicle Management.* **Note:** *This reference is changing to AFI 24-302.*

6.8.2. Incorporate tool control program procedures in FOI, specifying tool control and accountability procedures.

6.8.3. Ensure each section supervisor or delegated tool manager completes an inventory of all tool kits and documents it at least quarterly.

6.8.4. Ensure as a minimum all tool kits will be inspected and documented on a daily basis (when used) at the end of each shift.

6.9. Managing Equipment other than FSE.

6.9.1. Initiate requisitions for fuel/cryogenic tanks on AF Form 601, *Equipment Action Request,* for items not already authorized in applicable Allowance Standards (AS).

6.9.2. Understand requirements are specified in AS 488, *Fuel Storage and Gas Generating Equipment/Storage Tanks and Maintenance Support Equipment*. As a minimum the following items shall be located in or near the Fuels Management Flight: **Note:** Items listed may be co-located with VM shops, if necessary, but all items except for the vehicle wash rack must remain on FMT equipment accounts.

6.9.2.1. A vehicle wash rack equipped with appropriate environmental controls.

6.9.2.2. A degreasing machine (steam pressure washer) capable of cleaning engines and mobile fueling equipment (make sure the discharge from the degreaser drains into appropriate environmental controls).

6.9.2.3. Compressed air source.

6.9.2.4. One 10 or 20-ton capacity hydraulic jack.

6.9.2.5. Pneumatic impact wrench.

6.9.2.6. Approved static grounding post.

6.9.2.7. Two 10 or 20-ton capacity jack stands.

6.9.2.8. Multi-meter.

6.9.2.9. Tire dolly.

6.10. Automated Information Technology (AIT).

6.10.1. Ensure that all AIT equipment properly functions and provides accurate data to the FSC.

6.10.2. Implement mandatory use of fuels AIT equipment to enhance operational safety, accounting accuracy, and timeliness while enabling centralized command and control.

6.10.3. Ensure an annual inventory of all assigned AIT property is performed and documented.

6.10.3.1. Ensure relinquishment of custodial responsibilities occurs only after a joint inventory is conducted and documented, with incoming FMT, certifying accurate and complete inventory records. **Note:** **Attachment 13** contains inventory requirements and further guidance.

Chapter 7

DUTIES WITHIN FUELS MANAGEMENT STRUCTURE

7.1. Managing Fuels Flight Activities.

7.1.1. Information Manager and BSM-E functions may be consolidated under one person. Further deviations from the fuels management structure must be approved by parent MAJCOM with prior coordination from AF/A4LE.

7.2. The Information Manager Duties.

7.2.1. Is the focal point for maintenance of all publications, directives and T.O.s. listed in **Attachment 1** that provides a list of all major publications, T.O.s and Allowance Standards related to the fuels career field.

7.2.2. Establishes T.O. access with the base TO distributing office. For smaller flights, it is acceptable to establish a sub-account from an existing T.O. account.

7.2.2.1. Manages FMT Publication Familiarization Program. Familiarize personnel with applicable publications and advise them of significant changes.

7.2.2.2. Ensure flight members (military, civilian, and contracted) have access to T.O.s.

7.2.2.3. Maintain T.O.s required for individual base support requirements.

7.2.2.4. Maintain additional T.O.s required for training and deployments.

7.2.2.5. Training and deployment T.O.s in current status at all times; do not mark as "For Training Use Only". Use electronic versions of T.O.s for training when available. **Note:** The use of electronic versions of T.O.s is acceptable. If used they must be kept up to date.

7.2.3. Prepares and files all formal correspondence and ensures proper distribution of correspondence, reports, publications and forms.

7.2.4. Manages flight documents/records.

7.2.4.1. Documents review of Fuels Management Flight File Plan annually for accuracy and completeness. Coordinate changes with responsible Functional Area Records Manager (FARM).

7.2.5. Serves as Fuels Management Flight focal point for setting up all CPU accounts and maintain required documentation IAW AFPD 33-3, *Information Management*.

7.2.5.1. Implements information security program IAW AFI 31-401, *Information Security Program Management*.

7.2.6. Conducts training for assigned personnel on the use of computers to include security, use of email, internet, and locally used programs IAW AFI 33-202, Vol. I, *Network and Computer Security*.

7.2.7. Aids flight when identified errors, contradictions, procedures requiring clarification and material deficiencies are found and following procedures in T.O.s 00-5-1, *AF Technical Order System* Submit AFTO Form 22, *Technical Manual Change Recommendation and Reply* as needed.

7.2.7.1. Ensures all AFTO Form 22 submittals pertaining to the 42B series, 37A-1-101, and 37-1-1 T.O.'s shall be initiated at flight level, forwarded to the appropriate Fuels MAJCOM office for coordination and then sent to AFPA/PTPT office for disposition.

7.3. The BSM-E Administrator Duties.

7.3.1. Performs backup of the fuels automation systems and vital databases. FSC may accomplish this during nightly closeout.

7.3.2. Develops backup procedures and maintains backup media IAW DoD 4140.25-M and DLA Energy Policy.

7.3.3. Provides training for all fuels automation programs using DLA Energy Policy and operational user's guides.

7.3.4. Accomplish system changes and program releases as directed.

7.3.5. Provides assistance with software/hardware problems and facilitates resolution. Report all known or suspected errors to the appropriate organization/helpdesk.

7.3.6. Maintains current Automated Data Processing Equipment (ADPE) appointment letter and conducts annual inventory IAW local directives and as applicable.

7.3.7. Maintains continuity book containing at a minimum: ADPE appointment letter, user agreements, recent inventory listing, network layout (building or base), justification letters, and other pertinent information.

7.4. Managing and Conducting Fuels Operations.

7.4.1. The Operations Section is charged with management of refueling resources, flightline support, fuels operator maintenance, product movement, environmental support, and storage of bulk petroleum, cryogenic, and hypergolic products as required.

7.5. Duties of the Fuels Operation .

7.5.1. Supervises the Distribution, Cryogenics, Facilities and FARP functions under FMT span of control.

7.5.2. Reviews aircraft flying schedules for fuels support requirements and tailors work shifts accordingly.

7.5.3. Consults base resource protection committee concerning fuels/cryogenic products protection.

7.5.4. Reviews Fuels Flight security plans and programs.

7.5.5. Ensures proper security, storage, and operator maintenance of assigned equipment.

7.5.6. Submits requests for facility and equipment changes.

7.5.7. Reviews evaluation reports and validates corrective actions.

7.5.8. Manages assigned vehicles.

7.5.9. Establishes product rotation procedures for hydrant and fuel storage facilities where applicable, IAW DoD 4140.25-M.

7.5.10. Ensures adequate mobile and fixed facility filter elements are on hand for element changes.

7.5.11. Regularly uses all tanks, transfer pipelines, pumps, meters, filter-separators, and fillstands to help prevent deterioration of pumps, seals, and gaskets.

7.5.12. Exercises alternate resupply capability at least annually to validate training, facilities and support plans. If the base's alternate mode is tank truck or rail car, ensure the offloading area is in compliance with environmental regulations. If not, coordinate with BCE to find acceptable workarounds to allow alternate capability testing. Bases whose sole resupply mode is tank truck are not required to exercise alternate capability. Additionally, bases that receive via railcar and use the same off-loading headers during alternate mode of receipt do not require alternate capability testing.

7.6. Duties of the NCOIC Fuels Distribution.

7.6.1. Supervises fuels expeditors, mobile distribution, and refueling maintenance elements.

7.6.2. Assists Operations Section Chief with duties listed in paragraph 7.5 and ensures actions directed by the FSC are accomplished in a safe and efficient manner.

7.6.3. Coordinates with VM on scheduled maintenance and deficiencies.

7.6.4. Reviews flying schedules to ensure resources are available to meet requirements.

7.6.5. Periodically monitors operators performing refueling operations, refueling maintenance, and flight-line operations.

7.6.6. Reviews the BSM-E log-sheet daily and takes corrective action when necessary.

7.6.7. Performs Vehicle Control Officer (VCO) duties to include monthly briefings and inspections IAW base VCO guidelines. Duties may be delegated in writing to a subordinate.

7.6.8. Appoints alternate Airfield Driving Program Managers (ADPM).

7.7. Duties of the Fuels Flight Line Expediter.

7.7.1. Is responsible for coordinating and directing fuel servicing operations with FSC. **Note:** An expediter is not required for all ground fuel operations, but should be available if assistance is required.

7.7.2. Monitors fueling operations, initiates action to correct deficiencies, terminates all unsafe operations and reports discrepancies.

7.7.3. Maintains a tool kit for on-the-spot repairs to refueling vehicles.

7.7.4. Maintains a spill response kit for containment and clean-up of small leaks or spills. **Note:** Notifies Fuels Environmental Monitor each time kits are used.

7.7.5. Maintains a FOD collection bag or box in the expeditor vehicle and report FOD IAW local guidance.

7.7.6. Maintains communication with FSC at all times while on-duty.

7.8. Duties of the Mobile Distribution Supervisor.

7.8.1. Maintains close liaison with the FSC to report progress of operations and coordinate changes in scheduled work plans.

7.8.2. Ensures personnel are trained on necessary equipment.

7.8.3. Initiates driver disqualification action when an individual's attitude, or mental, or physical state are potentially unsafe for operating vehicles.

7.8.4. Familiarizes refueling unit operators with flight line safety, aircraft parking ramps, runway crossings, aircraft taxiways and control tower signals.

7.8.5. Trains personnel on radio operation/discipline procedures**;** **Attachment 2** lists the radio transmission codes.

7.8.6. Serves as the flight ADPM.

7.8.6.1. Coordinates with Airfield Management to schedule and complete ADPM training for the Primary and alternate ADPM's.

7.9. Duties of the Refueling Maintenance Supervisor.

7.9.1. Is responsible for inspecting, documenting, and maintaining refueling vehicles and equipment.

7.9.2. Develops specific checklists and training plans outlining team member responsibilities.

7.9.3. Establishes a special purpose vehicle checkpoint using the team concept. Preventative maintenance teams consist of four people: vehicle operator, one person at front of the vehicle, one person at rear of the vehicle, and team chief. **Note:** A vehicle checkpoint is not required at non-flying activities. Operator inspections are still required using appropriate forms. At bases with less than 20 full-time fuels personnel or during weekends, holidays and stand-down periods, preventive maintenance teams may consist of two or three persons to inspect only the number of vehicles anticipated to support workload.

7.9.3.1. Have a covered shelter for refueling unit pumping system maintenance operations. **Note:** At contingency locations where facilities and space may be limited, recommend co-located maintenance facilities for VM and Refueling Maintenance.

7.9.4. Inspects pre-positioned or dispersed vehicles in place at the option of the FMT.

7.9.5. Performs inspections each day the vehicle/equipment is used.

7.9.6. Performs vehicle/equipment pre-checks.

7.9.7. Each vehicle/equipment operator performs a pre-check prior to use. The operator:

7.9.7.1. Ensures the vehicle was inspected within the last 24 hours.

7.9.7.2. Performs a "walk around" inspection of the vehicle checking for damage, fluid leaks and other obvious discrepancies such as flat tires.

7.9.7.3. Does not move the vehicle or equipment if it fails the requirements outlined in paragraphs 7.9.7.1 or 7.9.7.2.

7.9.7.3.1. Reports the discrepancy to the FSC and takes corrective action per instructions.

7.9.8. Inspects all vehicles/equipment at least every 7 days.

7.9.9. Trains personnel to inspect and maintain pumping systems; records inspection results on appropriate forms.

7.9.10. Reviews vehicle/equipment inspection forms and validates repairs before the vehicle/equipment is released for service.

7.9.10.1. Uses the AF Form 1807, *Operator's Inspection Guide and Trouble Report (Fuel Servicing)* and/or AF Form 4427 *Operator's Inspection Guide and Trouble Report (Fuels Support Equipment) (FSE)* to annotate discrepancies.

7.9.10.1.1. Removes unsafe or inoperable vehicles/equipment from service and repairs or turns equipment over to the appropriate maintenance activity for corrective action.

7.9.11. Coordinates with VM to ensure all required vehicles/equipment are turned in on time for scheduled and unscheduled maintenance inspections.

7.9.11.1. Performs corrective action on pumping system discrepancies; turn over chassis discrepancies to VM for corrective action.

7.9.11.2. Coordinates with Vehicle Maintenance and Analysis section to turn in appropriate documents to ensure maintenance actions are input into On-line Vehicle Interactive Management System (OLVIMS).

7.9.12. Updates fuels vehicles/equipment in BSM-E.

7.9.13. Establishes an effective vehicle/equipment corrosion control program IAW TO 36-1-191.

7.9.14. Ensures all tool kits will be inspected and documented on a daily basis (when used) at the end of each shift.

7.10. Duties of the NCOIC Facilities.

7.10.1. Supervises bulk fuel storage facilities, hydrants, service station, cryogenics, and performs Environmental Monitor duties under FMT span of control. **Note:** Bulk storage applies to all Non DLA Energy contracts.

7.10.2. Coordinates receipt, storage, transfer, and inventory of bulk/packaged fuels, deicing fluid, methanol, anhydrous ammonia, compressed gas cylinders, cryogenic products, Liquefied Petroleum Gas (LPG), Compressed Natural Gas (CNG) and other stored fuel products.

7.10.3. Ensures sampling/testing is performed as prescribed by the 42B-series T.O.s. during receipts. Coordinates with lab personnel to ensure samples are taken.

7.10.4. Coordinates inspection and organizational maintenance on all hydrant systems, and bulk storage facilities and associated equipment.

7.10.5. Reviews AFTO Form 39, *Fuel System Inspection and Discrepancy Report* for permanently installed hydrant systems and bulk storage facilities.

7.10.6. Ensures tank trucks and tank cars are inspected for hazardous conditions before off-loading.

7.10.7. Identifies if hazardous conditions exist; and performs the following:

7.10.7.1. Notifies the quality assurance representative, MAJCOM, and AFPA who, in turn, will coordinate action with DLA Energy Contracting Division.

7.10.7.2. Documents all delivery refusals in writing within 24 hours IAW DoD 4140.25-M, with an information copy to the parent MAJCOM, AFPA, DLA Energy, and/or DLA Energy Regional Offices.

7.10.8. Performs flight Environmental Monitor duties as follows:

7.10.8.1. Provides environmental and safety topics to be used for flight daily safety briefings.

7.10.8.2. Provides at least quarterly, a safety/environmental briefing in coordination with the Safety Monitor and documents fuels personnel attendance. The briefing will include these topics as a minimum: job hazards, safety precautions, first-aid measures and off-duty seasonal hazards and precautions. **Note:** Quarterly briefings should also include key items: (for example: handling fuel soaked clothes, prenatal precautions, chemical hazards, PPE, use and wear of contact lenses, etc.)

7.10.8.3. Coordinates with LRS QA OIC/Superintendent to determine annual recurring expenses eligible for environmental funding.

7.10.8.4. Coordinates with installation environmental office to determine environmental compliance actions and projects upon DLA Energy's annual request for action.

7.10.8.5. Advises FMT on recurring environmental expenses IAW DoD 4140.25-M and DLA Energy Policy.

7.10.8.6. Stays familiar with emergency funding reimbursement procedures for spill cleanup actions IAW DoD 4140.25-M, and DLA Energy Policy.

7.10.8.7. Responds to and investigates all fuel spills under FMT purview. **Note:** Shift supervisors will respond after normal duty hours; additional guidance is provided for fuel spills in paragraph 1.5.

7.11. Duties of the Facilities Supervisor.

7.11.1. Maintains a base service station, and bulk storage to provide automotive gasoline, diesel fuel, and approved alternative fuels for all authorized vehicles and equipment.

7.11.2. Equips the service station with a phone for customer use to report emergencies.

7.11.3. Provides and maintains spill kit/absorbent material ready for use.

7.11.4. Uses AFTO Form 39s IAW T.O. 37-1-1 to record deficiencies.

7.11.5. Obtains work order numbers from BCE and records on the AFTO Form 39.

7.11.6. Ensures BCE properly documents the AFTO Form 39 when deficiencies are corrected.

7.11.7. Observes/tracks the condition and performance of installed filters, separators and strainers.

7.11.8. Updates the facility/equipment status in BSM-E as applicable.

7.11.9. Takes/monitors inventories IAW DoD 4140.25-M and/or DLA Energy Policy.

7.12. Duties of the Hydrant Supervisor.

7.12.1. Coordinates operator's maintenance and use of hydrant systems.

7.12.2. Establishes a hydrant system flushing program IAW T.O. 37-1-1.

7.12.3. Updates the hydrant status board in BSM-E.

7.12.4. Coordinates fuel transfers between bulk storage tanks and hydrant tanks.

7.12.4.1. Ensures communication is maintained during fuel movement via telephone or radio.

7.12.4.2. Ensures that operators remain in immediate vicinity during fuel movement IAW T.O. 37-1-1.

7.12.4.3. Ensures operators establish contact every 10 minutes between the transfer and receiving points during the last 30 minutes of the estimated transfer completion time.

7.12.4.4. Monitors progress during transfer and receipt operations when Fuels Manager is installed for use.

7.13. Duties of the Cryogenic Storage Supervisor.

7.13.1. Receives, stores, transfers, inventories, performs sampling and documents transactions related to LOX and LIN under FMT control.

7.13.2. Establishes an effective cryogenics conservation program to minimize losses.

7.13.3. Ensures sampling/testing is performed as prescribed by the 42B-series T.O.s.

7.13.4. Ensures all odor and particulate testing is performed.

7.13.5. Establishes a safety program IAW AFOSHSTD 91-67.

7.13.6. Inspects AFTO Form 134, *Aviator Breathing Oxygen Servicing Trailer Log (Liquid/Gaseous)*, on LOX carts prior to servicing. Do not service if the form is not properly annotated. **Note:** See T.O. 42B6-1-1, *Quality Control of Aviator's Breathing Oxygen/Aviators Gaseous Breathing Oxygen*, for specific responsibilities on documentation of the AFTO Form 134, quality control requirements, and restrictions on filling LOX carts.

7.13.7. Develops written procedures to identify, report, and limit low use LOX carts. Coordinate procedures with using organizations.

7.13.8. Performs required and periodic maintenance.

7.13.9. Performs corrosion control on cryogenic tanks and equipment and submits work requests for painting as required.

7.13.10. Maintains vacuum on all storage tanks IAW T.O. 37C2-8-1-116 WC-*1*, *Vacuum Limits.*

7.13.11. Completes all periodic inspections IAW T.O. 37C2-8-1-116 WC-1 to ensure loss rates are minimized.

7.13.12. Ensures all cryogenics sampling and gaseous cylinders are hydrostatically compliant and performs corrective actions to maintain them in ready state.

7.13.13. Documents vacuum/meter readings and date on AFTO Form 95. Repairs and/or replaces tanks that develop a history of poor vacuum performance.

7.13.14. Coordinates with lab personnel to ensure scheduled tests are taken and ensure results are entered in BSM-E.

7.13.15. Ensures that carts are not filled if they do not meet safe operating conditions.

7.14. Duties of the FARP Team Chief.

7.14.1. Monitors FARP personnel and equipment to ensure all training is accomplished, qualifications are maintained, and readiness status meets mission operation requirements.

7.14.2. Briefs FARP personnel on all policies issued by AFSOC/A4RE or ACC/A4RE.

7.14.3. Provides FMT with a weekly status update.

7.14.4. Provides the FSC with a roster of primary and alternate team members on recall standby.

7.14.5. Coordinates with the flying squadron's planners/schedulers to ensure personnel availability for training and mission requirements.

7.14.6. Submits the FARP budget to AFSOC/A4RE or ACC/A4RE by 1 April each year.

7.14.7. Submits a mission sheet to AFSOC/A4RE or ACC/A4RE after every FARP mission or tasking (to include training) within two duty days after return to home station.

7.14.8. Ensures FARP operations are conducted as outlined in AFI 11-235, *Forward Area Refueling Point (FARP) Operations*.

7.14.9. Provides a trip report to AFSOC/A4RE or ACC/A4RE after each FARP TDY or deployment within five duty days upon return to home station.

7.14.10. Ensures each FARP program has and maintains required amount of hoses to perform DOC tasked/UTC requirements; hoses must be available at all times.

7.14.11. Tracks FAM cart maintenance and reports discrepancies using SOF Sustainment Asset Visibility Information Exchange (SSAVIE) software.

7.14.12. Ensures all operators remain current by performing at least one FARP mission every twelve months, from fixed wing aircraft to rotary wing or fixed wing aircraft with engines running, under blacked out conditions using Night Vision Goggles (NVGs).

7.15. Managing the Fuels Information Service Center (FISC).

7.15.1. The FISC is charged with the managing fuels resources, providing flight support, product accounting, and laboratory analysis of fuel, cryogenic, and hypergolic products as required.

7.16. Duties of the FISC .

7.16.1. Supervises the FSC, Fuels Support, and Fuels Laboratory functions.

7.16.2. Reviews flying schedules and coordinates with Fuels Operations Section Chief to meet mission requirements.

7.16.3. Reviews inspection evaluation reports and validates corrective actions.

7.16.4. Familiarizes fuels controllers with DWCF principles and procedures set forth in DoD 4140.25-M.

7.16.5. Ensures all fuels support functions are accomplished.

7.16.6. Ensures laboratory technicians do not perform tests, work with chemicals or use equipment unsupervised until they are fully trained on the task.

7.16.7. Reviews lab reports, ensures fuel meets quality standards and identifies negative trend patterns.

7.16.8. Recommends changes to FMT to improve product quality.

7.16.9. Submits request for operating a fuels radio net; a separate radio net for Fuels Management is the preferred method.

7.16.10. Ensures classified computer systems are maintained IAW local security guidance.

7.16.11. Ensures FSC relocation procedures are established to ensure uninterrupted fuel support is maintained.

7.16.12. Ensures FSC personnel verify grade of fuel and tank custodian prior to each fuel delivery from Fuels Management.

7.16.13. Obtains detailed base "Liquid Fuel System" schematics from BCE and color code active facilities by product IAW clipboard color scheme described in **Attachment 5**. Identify on the schematic all major fuels facilities by name (i.e., FSC, Lab, Hydrants, etc.). Provide parent MAJCOM a current copy of schematics when facility changes occur or as directed.

7.17. Duties of the NCOIC FSC.

7.17.1. Monitors fuels operations and maintains fuel accounts according to this directive and DLA Energy Policy. Uses BSM-E to collect, store, monitor, and process:

7.17.1.1. All fuel servicing and accounting transactions.

7.17.1.2. Product inventory management.

7.17.1.3. Vehicle and equipment status.

7.17.1.4. Events of flightline activity using FMD 20-codes.

7.17.1.5. List of key personnel including element and home telephone.

7.17.1.6. Submits data via BSM-E to FES according to DLA Energy processing guidance.

7.17.1.7. Reconciles daily within the FES and clear rejects IAW DLA Energy Policy.

7.17.1.8. Maintain a document control function for fuels documents and transactions processed IAW DLA Energy Policy.

7.17.1.9. Provide current inventory status of all products and other pertinent information on receipts, storage, and issue transactions and monitors IMP/WRM/MEL levels.

7.17.2. Maintains a backup copy of the BSM-E system IAW DLA Energy Policy.

7.17.3. Maintains one DLA Energy provided Uninterruptible Power Source (UPS) for the BSM-E server.

7.17.4. Coordinates with using organizations for fuel requirements forecasting.

7.17.5. Displays flight line layout showing all servicing locations.

7.17.6. Monitors aircraft sortie generation status.

7.17.7. Acts as the single point of contact for the flight during other than normal duty hours.

7.17.8. Transfers pertinent information to each shift controller, Fuels Operations, FISC Section Chief, FMT and supporting agencies.

7.17.9. Informs FMT, Operations Section Chief, FISC Section Chief, WFM and/or VM whenever in-commission rates reach MEL status.

7.17.10. Maintains a list of emergency power generator locations and trained operators.

7.17.11. Communicates using radios and telephones. Radios are primary means of communication between FSC and fuels operations. The FSC requires immediate contact with the Maintenance Operations Center (MOC) and must maintain positive control over all fuels facilities and flight line operations. Equips the FSC with at least three telephone lines:

7.17.11.1. A “Class A” line.

7.17.11.2. A “Class C” line.

7.17.11.3. A direct line to MOC.

7.17.11.4. Recommends adding FSC to the crash net for emergency notifications.

7.17.12. Provides fuel inventory and equipment status to the Installation Control Center as requested.

7.17.13. Equips the FSC with:

7.17.13.1. A standard base grid map with all fuel facilities marked or highlighted.

7.17.13.2. A fuels alert recall roster.

7.17.13.3. Disaster/emergency checklists or operating instructions.

7.17.13.4. An alternate parking plan to relocate fueling equipment.

7.17.14. In event of an emergency, the fuels controller:

7.17.14.1. Notifies chain of command IAW locally established procedures.

7.17.14.2. Records actions taken and personnel notified.

7.18. FSC Issuing Servicing Clipboards.

7.18.1. FSC personnel issue servicing clipboards containing the following forms:

7.18.1.1. AFTO Form 422, *Differential Pressure Log*.

7.18.1.2. DD Form 1898, *Energy Sale Slip*.

7.18.2. At time of dispatch fuels controllers obtains information concerning servicing request and provide the fuels operator with:

7.18.2.1. Grade of fuel.

7.18.2.1.1. Obtains the reason and estimated quantity for defuel requests, and asks if contamination is suspected.

7.18.2.2. Refueling vehicle/equipment registration number.

7.18.2.3. Authorized delivery point (aircraft type and serial number or facility number).

7.18.2.4. The applicable fuel servicing checklist.

7.19. FSC Marking Clipboards.

7.19.1. Marks the clipboard front to indicate product type and vehicle/equipment registration number.

7.19.2. Color-codes clipboards when handling more than one grade of aviation or ground fuel, (i.e., a base handling JP-8, MUR and LS2/DS2, is not required to color code their aviation fuel clipboards, but is required to color code their ground products clipboards). Use the color scheme in **Attachment 5**.

7.20. FSC Weather Warnings.

7.20.1. Fuels controllers notify all fuels personnel a weather warning. **Note:** This includes both DLA Energy contractors and other Fuel contractors.

7.20.2. Records all pertinent information associated with weather condition.

7.20.3. Terminates fuel operations, to include commercial cryogenics receipts and issues performed outdoors, and bare base cryogenic operations when:

7.20.3.1. Lightning is within 5 miles.

7.20.3.2. Other potentially hazardous conditions exist as determined by the base weather officer.

7.20.4. Permits the following operations to continue:

7.20.4.1. Issues from the base service station.

7.20.4.2. Commercial and DoD pipeline receipts.

7.20.4.3. Vehicle movements (including refuelers).

7.20.4.4. Pipeline transfer operations (including bulk storage to hydrant tanks).

7.20.5. Informs all elements to resume operations and annotates termination time.

7.21. FSC Controlling Keys.

7.21.1. Maintains spare keys for locks used to secure fuels equipment, facilities and refueler ignitions.

7.21.2. Ensures the fuels laboratory maintains keys and locks used for the flight Caution Tag program.

7.21.3. Ensures keys for LOTO program are maintained by FMT appointed personnel

7.21.4. Validates spare keys for operation and correct identification semi-annually. Afterwards routes the inspection report through the FMT.

7.21.5. Replaces the spare key or re-cylinders the lock when a spare key is lost.

7.21.6. Ensures keys are kept in the ignition of fueling units and propellant transporters at all times.

7.21.7. Ensures keys issued to personnel for extended periods of time for operational use will be signed for using an AF Form 1297, *Temporary issue receipt*.

7.22. FSC Accounting for Special Fuels, Cryogenics and Hypergolic Products.

7.22.1. Accounts for other propellants, oxidizers, pressurants, and related items according to DLA Energy Policy.

7.22.2. Performs accounting for fuels, cryogenics, hypergolic IAW DLA Energy Policy.

7.22.3. Requisitions cryogenics products IAW DLA Energy interim ordering instructions and accounts for LOX and LIN according to DLA Energy Policy.

7.23. Duties of the NCOIC Fuels Laboratory.

7.23.1. Ensures BSM-E is up to date and reflects current/accurate samples/due dates to include all fuel/cryogenic sample results. **Note:** Only qualified personnel assigned to the Fuels Laboratory can input lab sample data into BSM-E. Record visual fuel samples from vehicles, equipment and facilities at discretion of FMT for trend analysis of water accumulation/removal from fuel systems.

7.23.2. Uses AFTO Form 150, *Base Fuels Sampling and Testing Record*, at deployed locations if automation is unavailable.

7.23.3. Implements a caution tag program.

7.23.3.1. Notifies FSC when placing or removing an AF Form 980, *Caution Tag*.

7.23.3.2. Records caution tag actions in BSM-E.

7.23.3.3. Ensures that caution tag program data has been successfully backed up.

7.23.3.4. Places an AF Form 980 and lock on refueling/cryogenic equipment and facilities that are overdue for laboratory sampling.

7.23.4. Coordinates with danger tag monitor, for all unserviceable equipment items and determines if LOTO is warranted.

7.23.5. Ensures that an Air Force Test and Analysis Tool (AFTAT) account has been established and that all personnel assigned to perform laboratory testing are trained and identified as users in AFTAT. Remove personnel from account when personnel are no longer performing laboratory duties.

7.23.5.1. Ensures that all product samples are submitted to an area laboratory for testing are processed in AFTAT except at locations where automation is not available.

7.23.5.2. Includes FMT and MAJCOM email addresses in AFTAT report automated distribution.

7.23.5.3. Establishes sampling requirements schedule and laboratory correlation program IAW T.O. 42B-1-1.

7.23.6. Immediately notifies FMT, FSC, and OPS of any suspected contaminated or off-specification products for fuel, cryogenic, gases and hypergolic products.

7.23.6.1. Immediately removes fuel stocks, equipment and facilities from service using an AF Form 980 and a lock to prevent use.

7.23.6.2. Analyzes samples to determine problem and root cause.

7.24. Crashed Aircraft Fuel Samples.

7.24.1. Only qualified fuels laboratory personnel will draw and submit fuel samples associated with aircraft incidents IAW T.O. 42B-1-1.

7.24.1.1. Maintains a crash sampling kit IAW T.O. 42B-1-1.

7.24.1.2. Inventories and inspects kit annually for serviceability. Seals to prevent removal of equipment, and checks the seal semiannually, documenting both inspections in BSM-E. Re-inspects kit if there is any evidence of tampering.

7.25. Duties of the NCOIC Fuels Support.

7.25.1. Coordinates supply and equipment transactions with appropriate LRS flights.

7.25.2. Budgets for needed parts, tools and equipment.

7.25.3. Establishes bench stock and special level authorizations, as required.

7.25.4. Monitors equipment authorizations and Custodian Authorization/Custody Receipt Listings (CA/CRLs).

7.25.5. Provides FMT approved supply and equipment budget forecasts to squadron resource advisor.

7.25.6. Maintains an equipment custodian continuity book IAW AFI 23-110.

7.25.7. Evaluates and reports the overall fuels flight mobility status to FMT.

7.25.8. Must be familiar with unit DOC statement, UTC posturing, coding procedures, and status of all flight UTCs presented in AEF Reporting Tool (ART).

7.25.9. Must be familiar with Installation Deployment Officer (IDO) roles and Unit Deployment Manager (UDM) Guide.

7.25.10. Identifies in BSM-E personnel qualified as trainers.

7.25.11. Ensures the appropriate SEI is recommended and awarded to personnel IAW AFI 36-2101, *Classifying Military Personnel (Officer and Enlisted)*, and the AFECD.

7.25.12. Must identify mobility support funding requirements to the squadron resource manager in support of DOC tasked UTC requirements.

7.25.13. Ensures deployable personnel are fully trained.

7.25.14. Manages Government Purchase Card Program IAW AFI 64-117, *AF Government-Wide Purchase Card Program*.

7.25.14.1. Must complete Green procurement training through the Defense Acquisition University on-line course, *CLC 046 Green Procurement or CLG001 DoD GPC* and

CLG004 DoD GPC Refresher Training as these also satisfy the GPC holder training requirements.

7.26. Duties of the Fuels Mobility Support Section.

7.26.1. At the FMT's discretion, a Fuels Mobility Support Element can be created for locations storing and/or using Fuels Support Equipment (FSE). FMTs may also consolidate the Fuels Mobility Monitor and Fuels Mobility Support Section.

7.26.2. Identifies fiscal year mobility support funding requirements to the FMT and squadron commander's resource manager as required.

7.26.3. Ensures operator maintenance is performed on mobility equipment.

7.26.4. Maintains an operational file for TOs and records for all assigned equipment and FSE. **Note:** An operational file can be electronic, but must be current.

7.26.5. Prepares and processes equipment, w/associated (M/C/R) Readiness Spares Packages (RSP) and fuel kits for each UTC.

7.26.6. Coordinates with transportation, supply, and personnel functions to meet MAJCOM deployment time frames. Transfers accountability of CA/CRL items to a deployed supply account if deployment time period exceeds initial requirements.

7.26.7. Performs flight mobility monitor duties as determined by the FMT.

7.26.8. Maintains records of all FSE transactions (i.e. movement, maintenance, inspection, salvage, and transfer of equipment, etc.).

7.27. Duties of the Flight Mobility Monitor.

7.27.1. Monitors mobility personnel compliance in maintaining updated documents, individual mobility equipment, training, and immunizations.

7.27.2. Schedules personnel requiring special qualifications training.

7.27.3. Ensures members assigned to UTCs are fully trained and qualified to meet current Mission Capability Statement (MISCAP) requirements. If refresher OJT is required, coordinates with FM to ensure training is accomplished prior to deployment. Further requirements are found in **Attachment 7**.

7.27.4. Must be familiar with AEF on-line resources and references.

7.27.5. Schedules personnel with at least two years' retainability to attend ABFDS and FARP schools.

7.27.6. Maintains a current listing of all SEI, flight physicals, physiological training, and any other unique training requirements for ABFDS and FARP personnel.

7.27.7. Schedules flight physicals and physiological training at least 45 days before due date.

7.27.8. Maintains AF Form 702, *Individual Physiological Training Record*, and AF Form 1042, *Medical Recommendation for Flying or Special Operational Duty*, records for ABFDS qualified personnel.

7.27.9. Identifies mobility support funding requirements to the squadron resource manager in support of DOC tasked UTC requirements.

7.27.10. Prepares and processes equipment for deployment.

7.27.11. Coordinates with local agencies to meet MAJCOM deployment time frames.

7.27.12. Must be familiar with unit DOC statement, UTC posturing, coding procedures, and status of all flight UTCs presented in ART.

7.27.13. Must be familiar with IDO and UDM Guide.

7.27.14. Must complete FAM training.

7.28. Duties of the Fuels Training Monitor.

7.28.1. Administers the upgrade training program according to AFI 36-2201, *Air Force Training*.

7.28.2. Provides and documents fuels personnel with security training upon arrival and annually thereafter.

7.28.3. Maintains personnel qualifications in BSM-E.

7.28.4. Familiarizes fuel personnel on controlled or restricted area procedures IAW AFI 31-101, *Integrated Defense (FOUO).*

7.28.5. Develops training programs as determined by FMT for all assigned equipment and systems used by flight; includes local purchase items.

7.28.5.1. Includes servicing operations when applicable: hot refueling operations, concurrent servicing operations, sortie generation operations, and rapid defuels.

7.28.6. Coordinates Fuels Management Flight training program with squadron training.

7.28.7. Schedules/coordinates with NCOIC of Distribution to schedule drivers training through the Vehicle Control Non-Commissioned Officer (VCNCO).

7.28.8. Schedules generator training and ensures fuels personnel are ready to operate emergency power generators IAW AFI 32-1063 and documents accordingly.

7.28.9. Reviews and document all training records within Training Business Area (TBA) semi-annually.

7.28.10. Establishes a tank custodian training program IAW AFI 23-204.

7.28.10.1. Maintains a list of all organizational fuel tanks as identified in AFI 23-204, and maintain a trained tank custodians list in BSM-E or locally developed equivalent.

7.28.10.2. Conducts vehicle escort training and documents IAW AFI 23-204.

7.28.10.3. Will offer a minimum one organizational tank training class per month.

7.28.10.4. Provide training for all classes scheduled.

7.28.10.5. Contractors at operating locations will provide Org Tank training as required.

7.28.10.6. Refers to AFI 23-204 as a basic guide. Uses organization tank inspection checklist on Fuels Career Field CoP as a guide to ensure organizations understand and comply with tank custodian requirements.

7.28.11. Ensures training is accomplished and documented for the following:

7.28.11.1. Fire training/ reporting procedures.

7.28.11.2. Facility evacuation and vehicle evacuation from fuel servicing areas.

7.28.11.3. Fuel spill response.

7.28.11.4. Emergency shutdown procedures.

7.28.11.5. Hazard elimination.

7.28.11.6. Self Aid and Buddy Care (SABC)

7.28.11.7. Schedule Chemical, Biological, Radiological, Nuclear, and high-yield Explosives (CBRNE) Training IAW AFI 10-2501, *Air Force Emergency Management (EM) Program Planning and Operations,* and document on individual AF Form 1098, *Special Task Certification and Recurring Training*, BSM-E, or automated forms. **Note:** Most training requirements require completion of CBT's prior to attending training classes or hands on courses.

7.28.12. Ensures deployable personnel complete training as required.

7.28.13. Monitors/provides Task Qualification Training (TQT).

7.28.13.1. TQT will be accomplished within 60 days after CBRNE Defense Awareness and Survival Skills.

7.28.13.2. Trains personnel to perform duty tasks in MOPP 4 gear while driving/operating fuel vehicles and/or equipment. Discuss hazards associated with working in MOPP 4 gear before performing the training scenario. Ensures the trainee is under direct supervision of a certified trainer. **Note:** TQT must be accomplished prior to operating vehicles in MOPP 4 gear unsupervised.

7.28.14. Implements the FMT developed rotational training program utilizing appropriate core tasks identified in the Career Field Education and Training Plan (CFETP).

7.28.14.1. A formal rotational program is not required if the location has fewer than 20 military personnel and those with 12 to 15 month tour lengths.

7.28.14.2. Use the following guidelines and the CFETP as a template:

7.28.14.2.1. 5-Skill Level: Experience with task completion in fixed facilities, mobile distribution, hydrants, maintenance, and laboratory functions.

7.28.14.2.2. 7-Skill Level: Revisit areas necessary for the 5-Skill Level plus task completion in refueling maintenance, FSC, and cryogenics.

Chapter 8

INFORMATION COLLECTION, RECORDS, AND FORMS

8.1. Information Collections. No information collections are accomplished by this publication.

8.1.1. Records. Ensure that all records created as a result of processes prescribed in this publication are maintained IAW AFMAN 33-363 and disposed of IAW the AFRIMS Records Disposition Schedule located at **https://afrims.amc.af.mil/rds_series.cfm**. DLA Energy requires that DWCF records be maintained IAW DLA Energy Policy.

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DCS/Logistics, Installations & Mission Support

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

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AF Form 4427 *Operator's Inspection Guide and Trouble Report (Fuels Support Equipment (FSE)*

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AFTO Form 95, *Significant Historical Data*

AFTO Form 375, *Selected Support Equipment Repair Cost Estimate*

AF Form 601, *Equipment Action Request*

AFTO Form 422, *Differential Pressure Log*

DD 1898, *Energy Sale Slip*

AF Form 702, *Individual Physiological Training Record*

AF Form 1042, *Medical Recommendation for Flying or Special Operational Duty*

AF Form 1098, *Special Task Certification and Recurring Training*

AFTO Form 150, *Base Fuels Sampling and Testing Record*

AF Form 979, *Danger Tag*

AF Form 980, *Caution Tag*

AF Form 2005, *Issue/Turn-In Request*

AF Form 1297, *Temporary Issue Receipt*

AF Form 457, *USAF Hazard Report*.

Abbreviations and Acronyms

ABFDS—Aerial Bulk Fuel Delivery System

ACE—Alternate Capability Equipment

ACR—Authorization Change Requests

ADC/FDS—Aircraft Data Collection/Fuels Dispensing Systems

ADPE—Automated Data Processing Equipment

ADPM—Airfield Driving Program Manager

AEF—Air & Space Expeditionary Force

AFPD—AF Policy Directive

AFECD—Air Force Enlisted Classification Directory

AFCP—Alternative Fuel Compliance Plan

AFLMA—Air Force Logistics Management Agency

AFMA—Air Force Manpower Agency

AFMAN—Air Force Manual

AFMD—AF Manpower Document

AFMIA—AF Manpower and Innovation Agency

AFMS—AF Manpower Standard

AFOSH—Air Force Occupational Safety and Health Standards

AFPA—Air Force Petroleum Agency

AFRC—Air Force Reserve Command

AFRIMS—Air Force Records Information Management System

AFSC—Air Force Specialty Code

AFSC/SEG—AF Safety Center, Ground Safety

AFSS—Automated Fuel Service Station

AFTAT—Air Force Test and Analysis Tool

AIM—Advanced Interface Module

AIT—Automated Information Technology

ANG—Air National Guard

APOSD—Automated Point of Sale Device

ART—AEF Reporting Tool

AS—Allowance Standard

ASIC—Air and Space Interoperability Council

ASC—Aircraft Servicing Capability

AST—Above Ground Storage Tank

ASTM—American Society for Testing and Materials International

ATG—Automatic Tank Gauging

BCE—Base Civil Engineering

BEE—Base Bioenvironmental Engineering

BSM—E—Base System Modernization-Energy

BSME—ECAP—BSM-E Payback Capital Investment Program

BSP—Base Support Plan

CA/CRLs—Custodian Authorization/Custody Receipt Listings

CBRNE—Chemical, Biological, Radiological, Nuclear, and high-yield Explosives

CCDR—Combatant Commander

CFETP—Career Field Education and Training Plan

CMP—Centrally Managed Programs

CNG—Compressed Natural Gas

COCOM—Combatant Command

CoP—Community of Practice

COR—Contracting Officer Representative

COTS—Commercial-Off-The-Shelf

CP—Cathodic Protection

CRC—Coordinating Research Council

CSC—Combat Support Center

CSG—Component Steering Group

CSIP—Component Sponsored Investment Program

CWDE—Chemical Warfare Defense Equipment

DER—DLA Energy Region

DLA Energy—Defense Logistics Agency Energy

DLA—Defense Logistics Agency

DOC—Design Operational Capability

DoD—Department of Defense

DoDD—Department of Defense Directive

DR—Deficiency Reports

DRMO—Defense Reutilization and Marketing Office

DRRS—Defense Readiness Reporting System

DRU—Direct Reporting Unit

DVB—Data Verification Brief

DWCF—Defense Working Capital Fund

ECAC—Evasion, Conduct after Capture

EPR—Enlisted Performance Report

FAC—Functional Area Chief

FAM—Functional Area Manager

FAM CART—Forward Area Manifold Cart

FARM—Functional Account Records Manager

FARP—Forward Area Refueling Point

FASCAP—Fast Payback Capital Investment Program

FES—Fuels Enterprise Server

FISC—Fuels Information Service Center

FMD—Fuels Automated System

FSC—Fuels Service Center

FSE—Fuels Support Equipment

FGS—Final Governing Standards

FISC—Fuels Information Service Center

FM—Fuels Manager

FMFC—Fuels Management Flight Commander

FMT—Fuels Management Team

FOA—Field Operating Agency

FOD—Foreign Object Damage

FOI—Fuels Operating Instruction

FOL—Forward Operating Location

FORCE—Fuels Operational Readiness Capability Equipment

FSE—Fuels Support Equipment

FSEVWG—Fuels Support Equipment & Vehicle Working Group

GOCO—Government-Owned, Contract –Operated

HAF—Headquarters Air Force

HAZMAT—Hazardous Materials

HARM—Host Aviation Resource Manager

HUR—Hydrant Utilization Rate

IGESP—In-Garrison Expeditionary Site Plans

IAW—In Accordance With

IDO—Installation Deployment Officer

ICIS—Integrated Consumable Item Support

IMM—Integrated Materiel Manager

IMP—Inventory Management Plan

IPRB—Installation Planning Review Board

ISOPREP—Isolated Personnel Report

JCS—Joint Chiefs of Staff

JDRS—Joint Deficiency Reporting System

JPO—Joint Petroleum Office

LEAP—Logistics Education Advancement Program

LIN—Liquid Nitrogen

LOGDET—Logistics Detail Listing

LOTO—Lock Out Tag Out

LOX—Liquid Oxygen

LPG—Liquefied Petroleum Gas

LRS—Logistics Readiness Squadron

LRS/CC—Logistics Readiness Squadron Commander

MAJCOM—Major Command

MAFSS—Mobile Automated Fuels Service Station

MAX—Maximum

MDR—Material Deficiency Report

MEFPAK—Manpower and Equipment Force Packaging

MEL—Minimum Essential Levels

MEO—Most Efficient Organization

MEP—Management Engineering Program

MHE—Material Handling Equipment

MILCON—Military Construction

MIPR—Military Interdepartmental Purchase Request

MISCAP—Mission Capability Statement

MO—Manpower and Organization Office

MO—Manpower and Organization Office

MOB—Main Operating Base

MRSP—Mobility Readiness Spare Packages

MSDS—Material Safety Data Sheets

NCOIC—Non Commissioned Officer in Charge

NOA—Not Otherwise Authorized

NVG—Night Vision Goggles

OEBGD—Overseas Environmental Baseline Guidance Document

OL—Operating Locations

OI—Operating Instruction

OPLAN—Operations Plan

OPR—Office of Primary Responsibility

ORM—Operational Risk Management

OSHA—Occupational Safety and Health Administration

OVS—Overboard Vent System

PA—Property Administrator

PAT—Per Accomplishment Time

PIF—Productivity Investment Fund

PIMP—Pipeline Integrity Management Program

PLMC—Petroleum Logistics Management Course

PMEL—Precision Measurement Equipment Laboratory

POL—Petroleum Oil & Lubricants

POM—Program Objective Memorandum

POS—Peacetime Operating Stock

PPE—Personal Protective Equipment

PQDR—Product Quality Deficiency Report

PWRR—Prepositioned War Reserve Requirement

PWRS—Prepositioned War Reserve Stocks

PWS—Performance Work Statements

QAE—Quality Assurance Evaluator

RDS—Air Force Records Disposition Schedule

REPOL—Bulk Petroleum Contingency Report

RFM—Refueling Maintenance

RO—Responsible Officer

RSP—Readiness Spares Packages

SABC—Self Aid and Buddy Care

SAPO—Sub-Area Petroleum Office

SAVVIE—Sustainment Asset Visibility Information Exchange

SCP—Service Control Point

SEI—Special Experience Identifier

SERE—Survival, Evasion, Resistance, and Escape

SME—Subject Matter Expertise

SORTS—Status of Resources and Training System

SPCC—Spill Prevention Control and Countermeasures

SPR—Single Point Receptacle

SRM—Sustainment, Restoration, and Modernization

SRM/E—Sustainment, Restoration, and Modernization/Energy

STANAG—NATO Standardization Agreements

TASS—Tactical Automated Service Station

TBA—Training Business Area

TIM—Truck Interface Module

TM—Terminal Manager

TOs—Technical Orders

TPFDD—Time-Phased Force Deployment Data

TQT—Task Qualification Training

UIT—User Interface Terminal

UMD—Unit Manpower Document

UPMR—Unit Personnel Management Roster

UPS—Uninterruptible Power Source

UTC—Unit Type Code

U & TW—Utilization & Training Workshop

VCNCO—Vehicle Control Non-Commissioned Officer

VCO—Vehicle Control Officer

VIL—Vehicle Identification Link

VM—Vehicle Management

WAA—Wartime Aircraft Activity

WAPS—Weighted Airman Promotion System

WCDO—War Consumable Distribution Objective

WFM—Water and Fuels System Maintenance

WMP—War and Mobilization Plan

WPW—War Planner Workshop

WR-ALC—Warner Robins Air Logistics Center

WRM—War Readiness Materiel

Terms

Aerospace Fuels Laboratory—Is an area laboratory that provides testing services to bases on samples of petroleum and related products. Conduct specification tests to determine the quality of petroleum products under procurement and in the AF supply system.

AFPA Technical Division—Is assigned to the Operations Support Directorate of AFPA, and is the service control point for AF fuel quality issues. The Technical Division has worldwide

responsibility to identify, investigate, and correct problems involving aviation/ground fuel contamination, fuel electrostatic hazards, conservation and reclamation of petroleum products, and fuel/cryogenic receipt, storage, and mobile/fixed dispensing system deficiencies.

Automated Information Technology (AIT)—Is a set of program initiatives that are designed to electronically capture both fuel inventory and transaction data, which enhances productivity and management control of fuel products.

Bulk Petroleum Products—Are petroleum products delivered in volumes greater than 208 liters (55 U.S. gallons) such as tank trucks/cars, pipelines, coastal barges, and ocean tankers. This term can apply to several DLA Energy purchase programs including the bulk fuels program for military specification jet and marine fuels, the posts, camps, and stations commercial gasoline and diesels, and the bunkers fuel program. Product is stored in tankage having a fill capacity greater than 208 liters (55 U.S. gallons).

Business System Modernization/Energy (BSM-E)—A vertically integrated automated information system consisting of base-level components and "enterprise" level systems providing visibility of bulk fuel assets and transactions to Services, Combatant Commanders (CCDR), vendors, and DLA Energy.

Civil Aircraft—Are all non-government aircraft (domestic and foreign) other then contract and charter carrier aircraft.

Confined Space—Is a space that meets the following criteria:

1.—Is large enough and configured so a worker can bodily enter and perform assigned work; and

2.—Has limited or restricted means for entry or exit (for example: tanks, vessels, silos, storage bins, hoppers, vaults, manholes, and pits are spaces that may have limited means of entry); and

3.—Is not designed for continuous human occupancy.

Contract Carriers—Are air carriers under contract to any department of the US Government. They are under operational control of the department concerned at rates lower than published rates on file with the Civil Aeronautics Board.

Cryogenics—Is the science of refrigeration, with reference to methods for producing very low temperature products.

Cryogenics/Equipment—Items used in cryogenics areas:

1. Purge Unit—The GSU-62/M Air Purging Unit is a portable electric motor-driven blower and heater unit used to purge storage containers with heated air. Record purge unit inspections, maintenance, and conditions on AFTO Form 244. One purge unit per FP account storing cryogenics is authorized.

2. Vacuum Gauge—The vacuum gauge is a hand-held battery powered unit. Use this unit to monitor, in microns, the vacuum reading of the annular space of a cryotainer. Use the gauge in conjunction with a thermocoupler for an accurate reading.

3. Vacuum Pump—The PMU-4/E Vacuum Pump is a portable, explosion-proof electric-driven, oil free-air pumping unit which draws and maintains the insulating vacuum in storage containers. Record vacuum pump inspection, maintenance, and conditions on AFTO Form 244. One vacuum pump per FP account is authorized.

4. Cryogenics Samplers—Samplers are portable containers used to draw and transport cryogenic samples. Samplers do not require periodic maintenance record documentation, but they must be hydrostatically tested every five years.

Defense Logistics Agency Energy (DLA Energy)—Is an organizational component of the Defense Logistics Agency (DLA). DLA Energy is the integrated materiel manager/DoD central procurement agent for bulk petroleum, natural gas, coal and associated services. DLA Energy owns and manages the bulk petroleum products in the Department of Defense to the point-of-sale (end user).

DLA Energy Field Office—Is a subsidiary of a DLA Energy region. Responsibilities are often similar to those of the DLA Energy region. It may perform transportation and traffic management functions such as oversight of transportation-related contracts, product slate reporting, and management of inland petroleum distribution/transportation. Primary function is to act as a liaison for a DLA Energy region in support of contract administrative functions, inventory management, transportation and traffic management, and provide support to the Military Services and major commands. Selected DLA Energy field offices may perform quality surveillance in support of DLA-owned fuel received, stored and shipped within their regional areas.

DLA Energy Region—Is a management component of the DLA Energy with a geographic area of responsibility to monitor DLA Energy contracts for adequate customer support, control fuel deliveries, perform contract administration functions such as property administration and quality surveillance, provide/coordinate transportation support and emergency planning and report inventory/supply transactions.

Defense Working Capital Fund (DWCF)—Is the DoD revolving a fund that finances the buying and selling of goods and services. It also provides cost visibility and accountability to facilitate business operations. DLA inventories are sold to end user organizational accounts (military units and federal agencies) that reimburse the DLA Division – DWCF for costs incurred.

Design Operational Capability (DOC) Statement—Is a summary of a unit's mission and resources for which it has been organized, designed and equipped.

Determinable Losses—Is the actual loss of inventory, the cause of which is determinable; such as contamination, fire, downgrading of products, etc.

Forward Area Refueling Point (FARP)—Are fuel's operations used to hot refuel aircraft in areas where fuel is otherwise not available. Fuel is transferred from a source aircraft's (C-130, C-17, or C-5) internal tanks to receiver aircraft while both aircraft's engines are running. Missions typically accomplished at remote locations under blackout conditions.

Fuels Operational Readiness Capability Equipment (FORCE)—Is the capability to receive store, transfer, and issue petroleum products or support aircraft generation where fixed systems do not exist or require augmentation. FORCE is characterized by transportability, and is primarily employed for wartime missions. However, it can be used to support peacetime/humanitarian operations as required. Primary equipment items are R-18, R-19, R-20 & R-21.

Fuel-Related Mishaps—Are reportable fuel-related spill/mishap is any fuel spill as a result of a mishap, or any event resulting in suspected/confirmed fuel contamination, fuel commingling, fuel spill, fire, product loss, fuel handling/equipment damage and/or failure, fuel vehicle accident, and fuel related personnel injury.

Fuel Sample—Is a small part of a quantity of product representative of the enter quantity, used for inspection or to determine the quality of the product.

Fuels Support Equipment (FSE)—Are fuels and cryogenic related support equipment required to support/sustain base operations. This includes, FORCE, Legacy FMSE, and support assets such as cryogenics, bladders, lab, etc.

Ground Products—Refined petroleum products normally intended for use in administrative, combat, and tactical vehicles; material handling equipment; special purpose vehicles; and stationary power and heating equipment.

Hydrant System—Is an aircraft fuel servicing facility that can provide fuel through one or more outlets into an aircraft. The hydrant system generally consists of operating storage tanks (older hydrant systems normally have many 50,000 gallon tanks while newer systems normally have two 10,000 barrel tanks), pumps, filter-separators, pipelines, and dispensing.

Inventory Management Plan (IMP)—Is the DoD integrated plan of bulk fuel inventory levels and storage requirements designed to utilize DoD resources more efficiently and provide financial management data.

Military Construction (MILCON)—Is any construction, alteration, development, conversion, or extension of any kind carried out with respect to a military installation.

Off-Specification Fuel—Is Fuel that has more than one specification. Off-specification fuel can be blended as regraded fuels. Off-specification fuel is not identified as waste/hazardous waste fuel.

On-Specification Fuel—Is fuel that has a suitable quality to be returned to the base inventory. T.O. 42B-1-23, table 3-1, Management of Recoverable and Waste Liquid Petroleum Products, sets the criteria for suitable quality.

Organizational Fuel Tank—Is any fuel tank 55 gallons or larger that store petroleum products, other than integral vehicle tanks or hand-carried safety cans, not under exclusive fuels management control.

Peacetime Operating Stock (POS)—Is inventory held at a location to sustain peacetime operations. It includes the unobtainables, safety levels, augmented levels, and economic resupply quantity.

Prepositioned War Reserve Requirement (PWRR)—Is that portion of the war reserve materiel requirement that the current Secretary of Defense guidance dictates be reserved and positioned at or near the point of planned use or issue to the user prior to hostilities to reduce reaction time and to assure timely support of a specific force or project until replenishment can be effected.

Prepositioned War Reserve Stocks (PWRS)—Are the assets that are designated to satisfy the pre-positioned war reserve materiel requirement.

Quality Assurance Evaluator (QAE)—Is a person who represents the contracting officer in performing contractor evaluation functions.

Reusable Fuel—Is fuel that does not meet its original specification, but which through processing can be recovered to its original grade or a lower grade without reprocessing.

Reclaimable Fuel—Is fuel of known or determinable quality that can be used for the original grade without reprocessing.

Recoverable Fuel—Is fuel that still has useful physical or chemical properties (two parts; reclaimable and/or reusable).

Responsible Officer (RO)—Is appointed by the squadron commander. This person must be proficient in fuels management and is responsible for the care and safeguarding of the petroleum stocks. This person also ensures all accountable records are maintained and required reports are generated.

Unit Manning Document (UMD)—Is a computer product which lists manpower authorizations. It reflects how many people are authorized to accomplish the mission. MAJCOMs use this document to show allocated resources, and as the baseline for portraying the impact of application of new or reapplication of existing manpower standards. The UMD contains:

1.—The position number

2.—AFSC.

3.—Functional account code (work center).

4.—Authorized grade.

5.—Number of authorizations.

6.—A summary of authorizations for officers, enlisted, and civilians assigned to each unit by work centers.

Unit Type Code (UTC)—Identifies a specific capability of personnel and/or equipment to be deployed in support of various operations.

Wartime Aircraft Activity (WAA) Report—Provides planners with such information as sortie rates, sortie duration, gallons per sortie. Published as the War and Mobilization Plan (WMP), Vol. IV.

War and Mobilization Plan (WMP)—Is an Air Force plan that takes the Joint Strategic Capabilities Plan (JSCP), translates this into AF operational and logistics planning guidance, and publishes this in five volumes known collectively as the War and Mobilization Plan (WMP). The Wartime Aircraft Activity (WAA) listing is published as WMP, Vol. IV. The WAA lists line entries for each JCS-approved OPLAN.

War Consumable Distribution Objective (WCDO)—Is a document prepared by MAJCOMs to identify authorized quantities of war consumables to support AF wartime missions.

Attachment 2

RADIO TRANSMISSION CODES

Table A2.1. Radio Transmission Codes.

CODE	MEANING
10-1	Radio receiving poorly.
10-2	Radio receiving well.
10-3	Radio Check.
10-4	Acknowledged-Wil Comply
10-5	Standby.
10-6	Say again-Poor reception.
10-7	Location Out-of-Service.
10-8	Location In-Service.
10-9	What is your location?
10-10	Return to FSC.
10-11	Departing parking area.
10-12	How many gallons are out of unit?
10-13	Proceed to fillstand.
10-14	Arriving at fillstand.
10-15	Departing fillstand with full unit.
10-16	Request another unit at location.
10-17	Request supervisor at location.
10-18	Request standby fire truck at location.
10-19	Fuel Spill-request assistance at location
10-20	Entering parking area.
10-21	Unit requires maintenance-Discrepancy.
10-22	Ready to receive-Valves open
10-23	Ready to start transfer-Valves open.
10-24	Start servicing
10-25	End servicing
10-26	Pumps stopped/off
10-27	Transfer complete-Valves closed
10-28	Servicing canceled
10-29	Call FSC via telephone
10-31	Distinguished visitor in area
10-36	What is the correct time?
10-87	Fire-Request Immediate assistance!
10-97	Arrived at scene/location
10-98	Finished with last assignment

Note: Use the modified 10-series radio transmission code list to maintain radio discipline. FMTs may add other call signs to meet any local requirements.

Attachment 3

FMD MEMO 20-CODES

Table A3.1. FMD Memo 20-Codes.

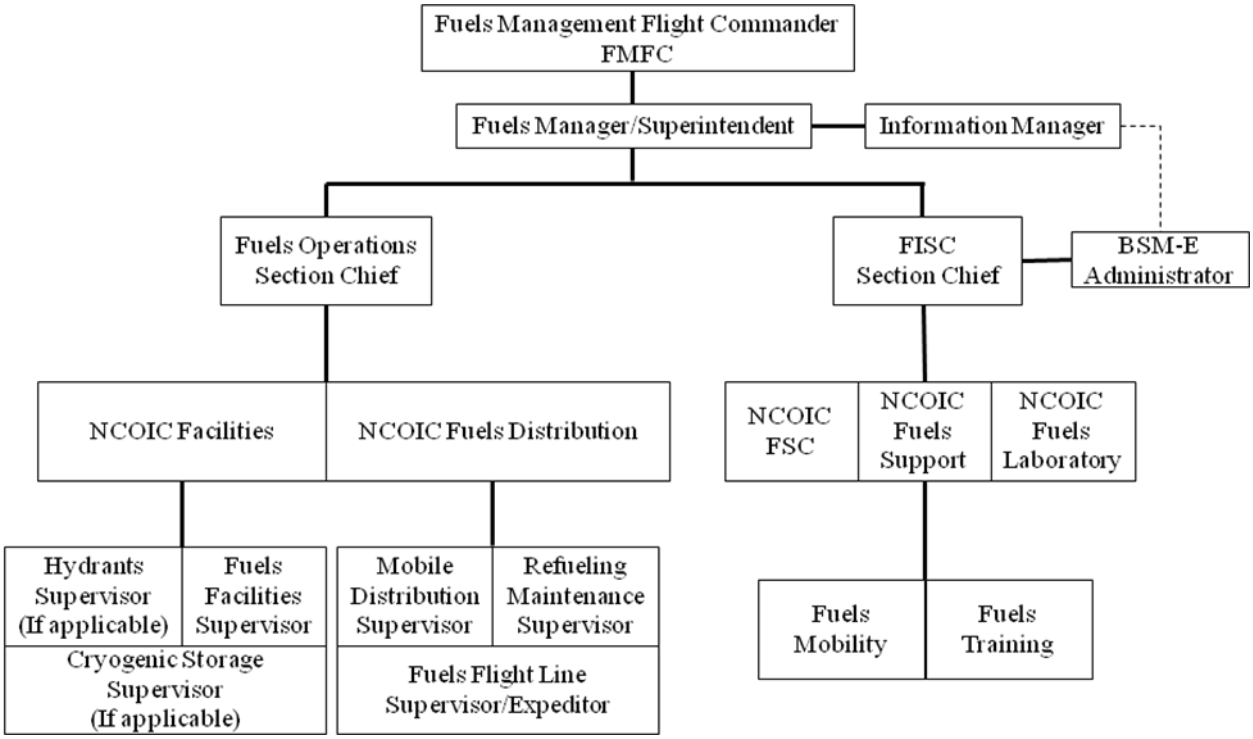
CODE	MEANING	FMD EXAMPLES OF USE IN THE MEMO FIELD:
20-A	Error _____ (MOC, Operator, Controller)	20-A Operator, wrong unit, 2nd unit sent
20-B	Refuelers Standing By	20-B A/C 10 min out, quick turn
20-C	CANX by_____	20-C MOC (Jones)
20-D	Delay Due to _____	20-D Only 1 crew
20-E	Custodian Verified (Tank, Bulk Drop)	20-E (Smith) TK40, bldg 22
20-F	Refueling Unit Multi-dispatched	20-F
20-G	A/C Multi-trucked	20-G 1 of 4
20-H	Hot Pits (Open/Closed)	20-H Open (Lowers)
20-I	IFE/Ground Emergency/Weather Hold	20- I IFE (landing gear 20 min out)
20-J	Refueling Asset(s) diverted to Higher Priority A/C	20-J
20-K	Multi-Source Refuel	20-K Panto, R-11
20-L	Hydrant Pit not utilized	20-L A/C parked on pit
20-M	Top Off	20-M 1K
20-N	Return To Bulk	20-N at L3
20-O	All Refueling/Defueling Assets Utilized	20-O C-17 Defuel in progress,N-4
20-P	All Personnel Utilized	20-P (6) Diverted A/C, stand-by personnel called in

Note: Use the following modified 20-series FMD Code list to aid in controlling flightline operations and quickly document events or actions. Additional information concerning each specific event can always be added at FMT discretion to further capture details or unique situations. FMTs may add additional Memo Codes to facilitate local requirements. This abbreviated method will be used as a data marker to capture standard like items of interest across the AF. Codes can be used as stand alone or have additional information entered. Not all Codes will apply to all locations.

Attachment 4

FUELS MANAGEMENT FLIGHT STRUCTURE

Figure A4.1. Fuels Management Flight Structure.



Note:

Fuels Manager Title is reserved for CMSgts**.**

Fuels Superintendent Title is reserved for SMSgts and MSgts.

Table A4.1. Standard Fuels Flight Office Symbols.

LGRF	Fuels Management
LGRFI	Fuels Information Service Center
LGRFIM	Fuels Information Manager
LGRFIB	Fuels BSM-E Administration
LGRFIC	Fuels Service Center
LGRFIS	Fuels Support
LGRFIL	Fuels Laboratory
LGRFO	Fuels Operations
LGRFOF	Fuels Facilities
LGRFOD	Fuels Distribution
LGRFOE	Fuels Expeditor
LGRFOM	Fuels Mobile Distribution
LGRFOR	Fuels Refueling Maintenance
LGRFOH	Fuels Hydrants
LGRFOC	Fuels Cryogenics

Attachment 5

CLIPBOARD COLOR SCHEME

Table A5.1. Clipboard Color Scheme.

PRODUCT	COLOR	STRIPES
AVGAS	Blue	
JP4	Yellow	
JP5	Yellow	Black Dashes
JP8	Yellow	Blue
JP8 + 100	Yellow	Green
JPTS	Yellow	Black
Jet A	Yellow	White
Jet A +100	Yellow	Green & White
TS1	Yellow	Red
Diesel, Low Sulfur	Brown	
Diesel, High Sulfur (Includes JP8 when used as Diesel)	Brown	Blue
Diesel, Ultra Low Sulfur	Brown	Yellow
Diesel, Biodiesel Blend (B20)	Brown	Green
Automotive Gasoline		
Unleaded	Red	Green
E85 (Ethanol)	Red	Blue
UDMH (Unseymmetrical Dimethylhydrazine)	Red	Yellow
Nitrogen Tetroxide	Brown	White
Liquid Oxygen	Green	Yellow
Liquid Nitrogen	Grey	Yellow

Attachment 6

FUELS SPECIAL EXPERIENCE IDENTIFIER (SEI) MATRIX

Table A6.1. Fuels Special Experience Identifier (SEI) Matrix.

Prerequisites to Award SEI							
SEI	**28**	**35**	**36**	**39**	**40**	**41**	**369**
Course	Refueling Equip/Maint J3AZR2F051 03AB	FARP	Cryo Maintenance J3AZR2F051 04AA	Fuels Quality Control J3AZA2F051 01RA (ITRO Course) and J3AZP2F051 01AA (AF Fuels Course)	ACCT Joint BSM-E 3 Week Basic Course	FORCE J3AZR2F051 05AA	ABFDS J3AZR2F051 02AA
PDS	O5O	N/A	DDG	OYY	N/A	Z7I	GOO
Minimum AFSC Skill Level	2F051	2F051	2F051	2F051	2F051	2F051	2F051
Minimum Experience *Plus 100% Task Qualification	1 Year *	6 Months *	3 Months *	6 Months *	6 Months *	N/A	N/A
Minimum Security Clearance Level	Secret	Secret	Secret	Secret	Secret	Secret	Secret
FMT Recommendation	X	X	X	X	X	X	X
Commander Approval	X	X	X	X	X	X	X

Notes:

1. FMT will evaluate personnel and only select the most qualified to attend specialized fuels courses. Factors to consider are:
2. Return on investment (ROI)
3. Retainability.
4. Career potential.
5. Refresher training is required when personnel fill UTCs requiring the SEI. It is highly recommended that members receive 30 days refresher OJT prior to filling the UTC.
6. Normal refresher training is given at the time intervals mentioned below:

1. SEI 028 - Every two years from initial training or last assignment in RFM.
2. SEI 035 - Every year from initial training or last mission flight.
3. SEI 039 - Every year from initial training or last assignment in a fuels laboratory.
4. SEI 040 - Every year from initial training or last assignment reconciling the fuels account in BSM-E.
5. SEI 369 - Every two years from initial training or last mission flight.

7. The specific refresher training required is determined by the FMT unless specifically identified via UTC or other training methods as they become available.

Attachment 7

FUELS PERSONNEL UNIT TYPE CODES

A7.1. Using the MEFPAK tool.

A7.1.1. The MEFPAK tool is the source for all UTCs and can be found at **https://www.my.af.mil/gcssaf/USAF/ep/browse.do?programId=t6925EC2E64F80FB5E044080020E329A9&parentCategoryId=-2018632**.

A7.1.2. Listed UTCs contain the mission capability statement as well as deployment characteristics of the UTC in terms of personnel and cargo tonnage requiring transportation.

A7.1.2.1. Unit and UTC readiness reporting must be timely and accurate.

A7.1.2.2. All personnel UTCs may be substituted IAW AFI 10-401.

A7.2. UTC Source Data Information.

A7.2.1. DCAPES is the source for MEFPAK, MANFOR (MISCAPs/UTC details) and UTA (UTC Availability).

A7.2.1.1. The Wartime Analysis Branch of the Air Force Manpower Agency (AFMA/MASR) maintains this data and the tool weekly.

A7.2.1.2. LOGMOD is the source for the LOGDET data.

A7.2.1.3. This information is provided to AFMA/MASR for updating the tool on a monthly frequency.

A7.2.1.4. All data is **UNCLASSIFIED.**

Attachment 8

FUELS SPECIALTY COURSES PREREQUISITE

Table A8.1. Fuels Specialty Courses Prerequisite.

Prerequisites for Fuels Courses				
Course	**Skill Level**	**Experience**	**Rank**	**Notes**
FORCE (J3AZR2F051 05AA)	5 Level	N/A	N/A	Must Complete the FORCE CBT on ADLS and have printed certificate of completition prior to course attendance.
ABFDS (J3AZR2F051 02AA)	5 Level	N/A	MSgt and below	Must meet ASC9C flying duty qualification standards. Recommended watching ABFDS refresher video prior to course.
RFM (J3AZR2F051 03AB)	5 Level	30 Days OJT in RFM	N/A	
Cryo Maint (J3AZR2F051 04AA)	5 Level	30 Days OJT in Cryo	N/A	
PLMC (J3AZR2F091 00AB)	7 Level	N/A	MSgt	MSgt selects may attend. TSgt's filling LEAP, QAE, Fuels Superintendent and Fuels Staff positions may attend.
ITRO				
Fuels Quality Control (J3AZA2F051 01RA)	5 Level	30 Days OJT in LAB	N/A	15 Day Course
AF Specific LAB (J3AZP2F051 01AA)	5 Level	30 Days OJT in LAB	N/A	1 Day AF Specific
BSM-E				
3-WEEK BASIC	5 Level	30 Days OJT in FSC	N/A	
Responsible Officer	7 Level	N/A	MSgt	Must complete DLA Energy RO CBT prior to course. TSgt's filling LEAP, QAE, Fuels Superintendent and Fuels Staff positions may attend.
Note: Civilians must have equivalent qualifications to attend				

Attachment 9

PERSONAL EQUIPMENT FOR FARP AND ABFDS SPECIALISTS

Table A9.1. Personal Equipment For FARP And ABFDS Specialists.

Equipment	UI	FARP	ABFDS	
Flight Suit		ea	4	2
Flight Gloves		pr	3	2
Flight Jacket (Summer)		ea	1	N/A
Flight Jacket (Winter)		ea	1	1
A-3 Bag or Equivalent		ea	1	1
Temperate Weather, Combat Boots		pr	2	1
Patches				
MAJCOM		ea	N/A	3
UNIT		ea	6	3
AFSOC		ea	6	N/A
American Flag		ea	6	3
Rain Suit		ea	1	1
Flyers Thermal Top		ea	2	2
Flyers Thermal Bottom		ea	2	2
Prescription Glasses		pr	2	2
Sunglasses		pr	1	1
Dust Goggles		pr	1	1
Poncho, Camouflaged		ea	1	N/A
Official Passport		ea	1	1
*Helmet w/Bag (HGU-26P or 55P)		ea	1	1
*Oxygen Mask		ea	1	1
*CRU-60 Adapter		ea	1	1
*Web Belt w/suspenders		ea	1	1
*Canteen w/cover and cup		ea	1	1
* Individual Body Armor		ea	1	N/A
*Sleeping Bag		ea	1	N/A
*Sleeping Bag pad		ea	1	N/A
*Butt Pack		ea	1	N/A
*First Aid Kit, Individual		ea	1	N/A
*Survival Knife (M-9)		ea	1	N/A
*Multiplier Tool		ea	1	1
*Mini Mag light w/holder		ea	1	1
*Waterproof Clothing Bag		ea	2	1
*Snaplink		ea	2	1
*Backpack, Large (Two Pieces)		ea	1	N/A
*Knee Pads		pr	1	N/A
*Last Resort Belt		ea	1	N/A
*Wrist Watch		ea	1	N/A
*Holster, 9MM		ea	1	1
*M-16/M-4 (Sling)		ea	1	N/A

Notes:

All items marked with an asterisk (*) are required to be turned in upon PCS movement or termination of specialty requirements. Exception: Helmet liners may be retained by the

individual; FARP personnel are authorized the Ballistic Tactical Helmet or HGU-26P or 55P Aircrew Helmet ABFDS personnel do not require equipment issue to attend the formal training course. Equipment will only be issued to those filling an ABFDS mobility/UTC position. The local life support section provides inspections and location for required helmets and masks. ABFDS operators sign out the required helmet and mask from the life support section as needed. ABFDS operators return the helmet and mask to the life support section on completion of mission requirements.

Attachment 10

MANAGEMENT ENGINEERING PROGRAM

A10.1. Key Management Engineering Program Organizations.

A10.1.1. AF Manpower Agency (AFMA) and MAJCOM Directors of Manpower and Organization administer the MEP through a dual concept of operation.

A10.1.2. AFMA provides analytical services to AF functional managers for core processes that are common to each command.

A10.1.2.1. MAJCOMs, through the MAJCOM/A1 offices and base-level Manpower and Organization Office (MO), provides analytical services to functional managers within respective MAJCOMs.

A10.2. Location of Manpower Agencies.

A10.2.1. AF/A1 is located in the Pentagon.

A10.2.1.1. AFMA is a Field Operating Agency (FOA), headquartered at Randolph, AFB TX.

A10.2.1.2. MAJCOM/A1 is located at headquarters locations for each command.

A10.2.1.3. MO is located on a host or main operating base.

A10.3. MEP Duties Assigned to AF Manpower Agency.

A10.3.1. Provides analytical services (process improvement program, continuous process improvement through enterprise reengineering), benchmarking, costing, facilitation, integrated resource management, organization, performance measures, and standards and variances that apply to more than one MAJCOM or for organizations with no management engineering capability.

A10.3.2. Provides technical guidance and support to functional OPRs, MAJCOMs, FOAs, and DRUs.

A10.3.3. Publishes all manpower standards.

A10.3.4. Serves as point of contact for all AF management engineering procedural matters.

A10.3.5. Develops and implements training on the latest MEP technologies. Implements the MEP as directed by AFMA.

A10.4. Duties of the Installation Manpower and Organization Office. The MO manages manpower for commercial activities which includes fuels management, aircraft maintenance, civil engineering, etc. The local MO:

A10.4.1. Provides analytical services (continuous process improvement, benchmarking, costing, facilitation, integrated resource management, organization, performance measures, and standards and variances that apply to wing functions (fuels).

A10.4.2. Advises wing commanders and functional (fuels) managers on effective resource management.

A10.4.3. Provides management engineering services in support of inputs to MAJCOM and AF process management studies.

A10.4.4. Assists base functional managers with Fast Payback Capital Investment Program (FASCAP) and Productivity Investment Fund (PIF) proposals.

A10.4.5. Validates workload exceptions submitted by commanders and functional managers.

A10.4.6. Assists commanders and functional managers in the development of performance work statements (PWS).

A10.5. Variances to Manpower Standards. To increase the applicability of manpower standards and still be responsive to unique requirements at each location, the MEP recognizes work variations due to mission, technology, or environment. These variations are identified as either plus or minus variances to the basic standard. The fuels community identifies the requirements for exceptions to the local Manpower and Organization Office. AF/A4LE recommends final approval or disapproval for fuels manpower determinant.

Attachment 11

EDUCATION AND TRAINING OPPORTUNITIES

A11.1. Logistics Education Advancement Program (LEAP).

A11.1.1. LEAP is a career broadening education program designed to provide selected NCOs with on-the-job experience and training in special fuels logistics areas. The objective is to provide LEAP NCOs with a broader experience background. Each position is a 3-year minimum assignment. **Note:** Those currently in the program and those who have been out of the program for 3 years or less are prohibited from voluntary cross training and are exempt from involuntary cross training programs.

A11.2. The five LEAP positions are:

A11.2.1. Two positions assigned to the Pentagon, Washington D.C. Will start at the AF/A4LE and then moves on to the Joint Staff to finish the tour. Person must be an E-7 prior to assuming Joint Staff duties. **Note:** LEAP NCO must be eligible/initiate Top Secret security clearance upon assignment to the AF/A4LE.

A11.2.2. Two positions located at Fort Belvoir, Virginia. Both start at AFPA and move throughout the organization and then they move on to work in the DLA Energy Operations Center and thereafter each commodity business unit.

A11.2.3. One position located at Wright-Patterson AFB, Ohio. Will start at the AF Tech Team, then to the Wright Patterson Fuels Area Lab, and then to the AFMC Fuels Staff.

A11.2.4. AF/A4L chairs a LEAP selection panel.

A11.2.5. Applicants must meet the following mandatory prerequisites:

A11.2.5.1. Hold a grade of E6 or E7.

A11.2.5.2. Completed 8 - 14 yrs total active federal military service as of 1 October in the year considered for assignment.

A11.2.5.3. Possess a 2F071 AFSC.

A11.2.5.4. Have at least a "Secret" security clearance.

A11.2.5.5. Eligible for reassignment.

A11.2.6. FMT's submit nominee's package to their respective MAJCOM consisting of:

A11.2.6.1. A one-page nomination letter from the unit commander or equivalent.

A11.2.6.2. Copies of last five Enlisted Performance Reports (EPR).

A11.2.6.3. A Data Verification Brief (DVB) obtained through Virtual Military Personnel Flight. **Note:** Applicants prioritized assignment preference list must reflect LEAP position preferences in the DVB.

A11.2.7. MAJCOMs consolidate and forward their nominee's packages to the AF/A4LE Fuels BOX at **af_fuels@pentagon.af.mil.A** board comprised of the Fuels Career Field Manager, AFPA Chief Enlisted Manager, and MAJCOM Fuels Chief Enlisted Managers will determine the final LEAP selection.

Attachment 12

AFPA TECHNICAL DIVISION

A12.1. Requirements when Technical Division assistance is requested.

A12.1.1. MAJCOMs and AF fuels activities will coordinate with the AFPA Technical Division on actions involving aviation/ground fuel contamination, electrostatic hazards, petroleum product conservation and reclamation, or matters involving fuel/cryogenic receipt, storage, and mobile/fixed dispensing system deficiencies.

A12.1.2. AFPA Technical Division will be the single focal point for coordination with DLA Energy regarding fuel disposition instructions involving off-specification, contaminated, or products not meeting use limits. Disposition instructions will be provided via written/electronic communication or AFTAT.

A12.1.3. Copies of pertinent reports, correspondence, studies, and data relating to prevention and correction of fuel contamination problems will be routed to the team as information or action items.

A12.1.4. Division members will maintain an up-to-date International Certificate of Vaccination and a valid passport for use in meeting requests for assistance from overseas commands.

A12.2. How to Request for Assistance.

A12.2.1. Installation FMTs will submit requests for on-site technical assistance through squadron commander or equivalent to their parent MAJCOM.

A12.2.2. The AFPATechical Division will respond immediately to requests for assistance from MAJCOMs and will be on-site for technical evaluation within three working days, or sooner, as required by the situation.

A12.2.3. Technical Division Chief will provide a written/electronic verification of the assistance response to the requesting organization and will include:

A12.2.3.1. Estimated team arrival date and duration of the visit.

A12.2.3.2. Name, rank or grade, title, SSAN, and security clearance of each participating team member.

A12.2.3.3. Required list of organizational or functional POCs (provide contact information).

A12.2.3.4. Support required by the team (transportation, billeting reservations, system briefings and availability of system as-built drawings).

A12.3. On-Site Evaluation.

A12.3.1. AFPA Technical Division has three basic objectives during each technical assistance visit or investigation.

A12.3.1.1. First objective is the identification and correction of suspected problem(s) to restore fuels capability back to normal mission activities.

A12.3.1.2. Second objective is a technical evaluation of base fuels facilities that will encompass the scope of quality and reliability assurance.

A12.3.1.3. Third objective is to provide technical training and expand the working knowledge of personnel to enhance career field technical proficiency

A12.3.2. Where feasible, problem-solving visits will also include an overall evaluation of the performance of distribution systems, operating techniques, and facilities. Technical assistance will be provided as available to optimize system or facility operations.

A12.4. Visit Out-Brief by AFPA Technical Division.

A12.4.1. The on-site evaluation team will provide a summary out-brief to installation and organizational leadership prior to departure. The summary out-brief will include:
A12.4.1.1. Summary of problem(s) found and correction action(s) taken.
A12.4.1.2. Summary of corrective actions that remain open and must be completed.
A12.4.1.3. Summary of recommendations to prevent further occurrences or improve operations.
A12.4.1.4. Summary of observations resulting from a technical evaluation of base fuels facilities that encompass the scope of quality/reliability assurance and as applicable an overall evaluation of the performance of distribution systems, operating techniques, and facilities.
A12.4.1.5. Areas requiring supplemental or further training.

A12.4.2. AFPA Technical Division will issue a written report of each visit not later than 30 days after completion of the site evaluation or investigation.

A12.4.3. Report will be forwarded to the applicable MAJCOM and action agencies by cover letter prepared for the AFPA Commander's signature.

A12.4.4. Recommendations made by the division requiring immediate attention will be forwarded to the action agency by written or electronic communication as soon as possible.

A12.5. AFPA Technical Division Report Evaluation duties.

A12.5.1. Maintain a case file for each visit made and subjective files for each category of problem encountered.

A12.5.2. Make a cumulative evaluation of the materiel contained in the files.

A12.5.3. Identify potential problem areas to MAJCOM/base-level activities.

A12.5.4. Identify areas where studies should be initiated to prevent or correct problems.

A12.5.5. Submit recommendations to appropriate action agencies that are responsible for changes to published criteria.

Attachment 13

AUTOMATED INFORMATION TECHNOLOGY (AIT) EQUIPMENT

A13.1. Operating Activities with AIT Equipment.

A13.1.1. Activities will report hardware and software problems to the DLA Energy Help Desk.

A13.1.2. Submit trouble tickets via telephone, email, or directly using **bsme.helpdesk@dla.mil** website.

A13.1.3. Activities will coordinate requests for procurement, replacement or upgrade of AIT with the AFPA.

A13.2. Disposition of AIT Equipment.

A13.2.1. When refueling vehicles and FSE are sent for depot maintenance or to the Defense Reutilization and Marketing Office (DRMO) the following AIT equipment will be removed.

A13.2.1.1. Automated Data Collection (ADC) equipment User Interface Terminal (UIT) and Truck Interface Module (TIM)

A13.2.1.2. Automated Point of Sale Device (APOSD) truck cradle, printer, TIM, and associated cables.

A13.2.1.3. All functioning Scully overfill protection equipment except the Advanced Interface Module (AIM).

A13.2.2. When refueling units are shipped to depot or DRMO; removed APOSD and Scully equipment will be maintained at the base as spares. Removed ADC equipment may be shipped back to the manufacturer for refurbishment or maintained as spares. If UITs are kept at the base, every effort should be made to keep them operational by periodic charging and/or rotational use in assigned vehicles. Contact the AFPA for further guidance.

A13.2.3. When a refueling unit is transferred to another location, the TIM located inside the Duocept will be removed. These modules are base programmed to a specific base fillstand(s) to prevent commingling of products. Once removed the TIM should be bench stocked until needed. After receiving a replacement vehicle, replace it's TIM (if equipped) with the one removed from the vehicle that left the base to ensure operational integrity, prevent product commingling and avoid Intellitrol reprogramming.

A13.3. AIT Inventory.

A13.3.1. Bases shall maintain an accurate annual inventory of all assigned AIT equipment.

Attachment 14

REFUELING UNIT ALLOWANCE STANDARDS

A14.1. Configuration codes explained.

A14.1.1. All validations will use the last 12 months of data to calculate authorizations. Activity outside of this window must be justified.

A14.1.2. Do not use days that do not represent normal operations, including hydrant utilization rates. **Note:** This information below also contains elements to manually determine refueling vehicle authorizations when per accomplishment times and historical refueling data does not exist.

A14.2. Determining Aviation Fuel R-11 Requirements.

A14.2.1. **VATA**: Two per AFB with an aviation fuel dispersing requirement when Not Otherwise Authorized (NOA).

A14.2.2. **VATB**: One per AFB for each additional grade of aviation fuel dispensed when NOA.

A14.2.3. **VATC**: To determine "refuel" truck allowances for configuration code "VATC": select the peak refuel workload day of each month for at least 6 of the previous 12 months. Compile truck issue data for issues in the ranges of 1-400, 401-1800, 1801-2700, 2701-3500, and greater than 3500. Servicings supported by configuration codes "VATL", "VATM", "VATN", "VATP" AND "VATQ" will not be counted when computing the allowances for configuration code "VATC".

A14.2.3.1. Total each range and divide the number of servicings in each range by the number of months which data was accumulated. Add the results together, including all fractions, round the sum up to the next whole number. Apply the following to each range total:

A14.2.3.1.1. 1 per 20 (28 for war time) fuel issues per day of 1 - 400 gallons (NOA "VATP")

A14.2.3.1.2. 1 per 16 (22 for war time) fuel issues per day of 401 - 1800 gallons (NOA "VATP")

A14.2.3.1.3. 1 per 11 (16 for war time) fuel issues per day of 1801 - 2700 gallons (NOA "VATP")

A14.2.3.1.4. 1 per 8 (12 for war time) fuel issues per day of 2701 - 3500 gallons (NOA "VATP")

A14.2.3.1.5. 1 per 8 (11 for war time) fuel issues per day of 3501 and up gallons (NOA "VATP")

A14.2.4. **VATH**: One per AFB averaging one to three defuels per day based peak defuel workload day of each month for at least 6 of the previous 12 months. When not otherwise authorized allowances under configuration code "VATL".

A14.2.5. **VATJ**: Two per AFB averaging four to eight defuels per day based peak defuel workload day of each month for at least 6 of the previous 12 months. When not otherwise authorized allowances under configuration code "VATL".

A14.2.6. **VATK**: Three per AFB averaging 9 or more defuels per day based peak defuel workload day of each month for at least 6 of the previous 12 months. When not otherwise authorized allowances under configuration code "VATL".

A14.2.7. **VATL**: Provides a vehicle for defueling to support a bomber alert force. (When not otherwise authorized allowances under configuration codes "VATH", "VATJ", OR "VATK")

A14.2.8. **VATM**: Provides two additional vehicles to support a dispersed fighter defense unit located on a main operatiing base (MOB).

A14.2.9. **VATN**: Provides three additional vehicles to support a dispersed fighter aircraft operating from a forward operating location (FOL).

A14.2.10. **VATO**: Provides an additional vehicle defueling to support a tanker alert force. (When not otherwise authorized allowances under configuration codes "VATH", "VATJ", OR "VATK")

A14.2.11. **VATP**: Provides an additional allowance to support "assigned" E-4, 747, or KC-10 aircraft at locations where a high flow (900 - 1200 gpm) hydrant system is not available and support is not provided by allowances under configuration code "VATC". Allowance is a calculated one vehicle for each two aircraft assigned.

A14.2.12. **VATQ**: Is an additional allowance to provide a refueling vehicle to support "assigned" aircraft with special fuel requirements when not already supported by other allowances.

A14.2.13. **VATX**: Provides additional allowances to support specific mission requirements not fully supported by other existing allowances. Authorizations must be approved by AF/A4LE, and the approval must be retained for the life of the special authorization.

A14.3. Aviation Fuel Hydrant Servicing Vehicle Requirements.

A14.3.1. **VAIN:** One for each 750 GPM simultaneous fuel servicing daily of primary receiver aircraft that are capable of receiving fuel from a type III hydrant system at rates equal to or greater than 750 GPM.(Maximum authorized per hydrant system is determined by dividing the maximum hydrant system flow rate by 750 and rounding up)

A14.3.2. **VAIO:** One for each 600 GPM simultaneous fuel servicing daily of primary receiver aircraft that are capable of receiving fuel from type I, II, or III hydrant systems at rates equal to or less than 600 GPM.(maximum authorized per hydrant system is determined by dividing the maximum hydrant system flow rate by 600)

A14.3.3. **VAIP:** One per AFB only when authorizations provided above are not sufficient to cover defuel requirements.

A14.4. Ground Fuel C-300 Requirements

A14.4.1. **VBBA:** Authorizes one 1200 gallon truck per AFB for each grade of ground fuel dispensed per 2000 gallons delivered daily. Additional allowances require full increments of

2000 gallons. The 2nd truck is allowed only when daily delivery requirements exceed 4000 gallons.

A14.4.2. **VBBD:** One per AFB with a waste fuel reclamation requirement. Waste fuel reclamation vehicles are NOT authorized if a base is using the allowance provided under NSN 2330-00-289-8934 or 2320-00-177-6778

A14.4.3. **VQWS:** One per AFB with a UTC JFDEF requirement.

Attachment 15

MISHAP REPORTING FORM

Table A15.1. Mishap Reporting Form.

Mishap Report

Generated on 12/08/2011 14:52 ZULU

Mishap Number:

CONTACT DETAILS

MAJCOM: **Base:**

Base DSN:

Additional POC (Fire Dept., Environmental, Bio Environmental, etc.): (as required)

MISHAP DETAILS

Mishap Date:	**Manufacturer:**
Mishap Time:	**Part Number:**
Mishap Type:	**Reg Number:**
Mishap Severity:	**Personnel Injured:**
Operation Type:	**MDR/QDR:**
Equipment Type:	**Lockout/Tagout:**
Equipment Category:	**RAC:**
Equipment Detail:	**Bladder Wet Date:**
Equipment Other:	
Primary Cause:	**Secondary Cause:**
Spill Class:	**Product:**
Estimated Gallons Spilled:	**Estimated Gallons Recovered:**
Weather Conditions:	

MISHAP COMMENTS

When mishaps do occur, the Air Force must learn the causes and take steps to ensure that those mishaps are not repeated. However, safety mishap reports, their attachments, and information extracted from them will not be used as evidence for punitive, disciplinary, or adverse actions. They will not be used as evidence in determining the misconduct or line-of-duty status of any personnel. They also will not be used to determine liability in administrative claims for or against the Government.

Note: AFPA will formally advise DLA Energy and AF/A4LE of fuel related mishap with corrective action being taken, precautions to prevent future occurrence and trend analysis. This will allow follow-up actions by AFPA as well as lessons learned to the field. Estimated Gallons Recovered: is fuel that was recovered and is reusable as its original grade.